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# NEXUS

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## Editorial

A growing number of people claiming to have been part of secret space fleets and off-world military activity (see Twilight Zone in this issue) has meant that lots of people are asking me what I think about it all. At the risk of losing many readers, this is my current assessment in a nutshell:

In the beginning, Earth was terraformed to achieve a desired life-form, one that emits high-quality Loosh. (Loosh, a word coined by Robert A. Monroe in his 1985 book *Far Journeys*, refers to any or all strong feelings or emotions.)

Our human bodies are that life-form. Our bodies are basically, self-running, self-fixing biosuits that emit Loosh when occupied by an immortal being of spirit (i.e., us). Earth was a paradise planet for a time: we led long lives; we had no war; and death was a departure, not an end. Some say that we were stagnating in our spiritual evolution, some say that our Loosh output needed increasing...but then along came something we call "negativity", which "infected" the very nature and essence of all life-forms. For the first time ever, fear entered our lives. Another Loosh jackpot.

This infection was considered by our neighbours to be so dangerous to their own existences that we were put under a type of quarantine to stop it from spreading to both physical and nonphysical neighbouring realms. What we call "reincarnation" is actually part of this "quarantine", i.e., our very souls cannot leave this realm *until* we have evolved a resistance to negativity by using our own free will. We learn via choices and results.

Fast forward many millennia, with umpteen civilisations coming and going, some cooperating on projects, some competing. There's lots of Loosh, and lots of learning going on for the immortal beings of spirit that we are.

It was expected that humanity would develop a type of inbuilt immunity or resistance to the effects of negativity. This "immunity" is valued by others. Humanity's genetic heritage includes the material of many non-human races, meaning that our *immunised* genes/DNA frequencies can be used to vaccinate or immunise other civilisations against the effects of negativity.

Many ETs with a genetic connection to us, run projects designed to transfer our "frequency" into their own race-frequency. Many visiting races come from "hive" or telepathic civilisations, where what we call "ideas" and "beliefs" are considered to be their equal of our viruses.

Earth has several "breakaway civilisations" on and within it, all with very advanced technology, which variously cooperate or compete on different projects and agendas.

On the matter of "bad ETs" and invasions that we need to fear and resist, *all* of this comes via duped "channellers" or from "insiders" working within the military-intelligence-industrial complex. There is a huge vested interest by various control groups to have us believe that we are under threat or attack.

Humanity will *not* be invited/allowed past the "quarantine" to join our neighbours until we demonstrate our maturity/immunity by how we treat our "neighbours" down here. I refer to the rest of life on Earth. Right now, an uncomfortable number of humans still kill life-forms for sport or pleasure. Whether they be animals, plants, microbes or spirits, life-forms are unique expressions, and thus size, shape or even physical density should not affect our recognition of their existence and sovereignty.

Always remember: what you focus your attention and energy on is exactly what you will bring closer into your sphere of experience. Choose wisely!

*Duncan*

# Letters to the Editor ...

## **DNA and Duality**

Hi Duncan: I was intrigued by Anthony Morris's article titled "The Numerical Universe: Order in Chaos" (June-July 2015, 22/04), particularly as I'm someone who professes little interest in arithmetic.

However, what Anthony's mathematical research has shown us is an algorithm which substantiates the unfolding "machine" for creation itself—and that *does* interest me.

This unfolding (actually, unzipping) is the very basis of the DNA replication process which "creates" organic life, which we now know very clearly as the amazing assembly line of biochemical "machines" which pull apart the DNA double helix and create a copy of each strand.

The DNA to be copied enters this assembly line into a "helicase" which spins the DNA at around 500 mph [805 kph] (about the speed that a jet flies), unwinding the DNA double helix into its two component strands. One strand is copied continuously; the other, however, must be copied backwards. To accomplish this intricate task, this strand is pulled out into loops which are then copied, one section at a time. After this is accomplished, there are two *new* DNA molecules. New life has been created!

What else Anthony's research has shown us is what the description of the creation of life above has also shown, and that is the dichotomy with which this occurs. From the very beginning there are two opposite parts striving in the most miraculous way to get together.

If one looks anywhere within or without, you can see this dichotomy revealed in every aspect of life: your left and right brain, night and day, male and female, good and bad, etc. (Did I mention half the people trying to destroy the Earth and the other half trying to save it?)

At any rate, as Anthony concurs, the opposing and balancing forces of resonance and damping are everywhere in nature: the spacing of electrons in an atom, branching patterns in plants, the joint spacings in animals that enable articulated movement, and the proportions of our own bones that allow us humans to be what we are. The important bit is that without this duality, nothing could move or even live.

The ancient people knew what we are just beginning to rediscover and, more amazingly, left detailed examples of their knowledge stretched across planet Earth for us to find, in ways that I still find hard to believe, just waiting for the day when we once again awaken from our imposed social stupor.

Regards,

Peter

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## **Faked Moon Landings**

Dear Editor: The letter from SCOD/OFSO, Spain (NEXUS 22/04), asserts that all was well with Apollo.

Even if we accept his ESA credentials as stated, what kind of technical evidence can this reader bring to the table, since the ESA was not constituted as an entity until 1973? This was *after* the Apollo missions were terminated.

Spacecraft tracking data alone does not provide proof of a manned mission to the Moon. During its own testing procedures, NASA established that it could simulate all aspects of such a mission.

This reader doesn't refer specifically to the points made in my articles about NASA's inability to send a man to the Moon [see NEXUS 22/03 and 21/05], instead substantiating his argument with indirect evidence.

This situation is a mirror reflection of that described in the prologue to Bennett and Percy's famous 1999 book *Dark Moon*, in which NASA's Director of Media Services, (the late) Brian Welch, protested that he had no time to look into matters that were nearly 30 years old (at the time), but he offered the presence of retro-reflectors on the lunar surface as tangible evidence of the Moon landings.

As if it's impossible to set up this facility with an unmanned craft.

This "staff member at ESA's control centre" states that he hadn't heard rumours from his many contacts that the landings were faked—which is as vacuous as Brian Welch's reply and indicative of "scraping the barrel" of evidence to protect the dying Apollo story.

If he wants to shut down the Apollo discussion, he should note that the majority of comments I receive are from intelligent, open-minded readers.

The question most often posed by them is whether the Apollo astronauts were consciously lying for political reasons or were otherwise manipulated into "believing" that what they did was "true".

Out of respect for those who have sacrificed themselves on the altar of Apollo, your reader should not protest to me but to NASA, since its own documents led to the questions posed as to the real possibility of achieving success with Apollo.

Yours sincerely,

Phil Kouts,  
New Zealand

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### **Apollo Patches Anomalies**

Dear Editor: I have had a long interest in the Apollo missions and have watched some of the many videos purporting to have proof.

I have just watched Marcus Allen's video posted on YouTube on 15 December 2013. It was a very informative video.

Everyone who thinks about the fakery automatically comes up with the same things about the flags, the "C" rock, etc., but they have been ignoring the things that are blatant to the trained eye.

I have been a video/ lighting cameraman, special-effects technician and model-maker, and there has always been something just not right with the Apollo images and film footage.

I have simulated model spacecraft landing on alien worlds, and some of the techniques are extremely simple to produce. You don't need computergenerated imagery to create realistic effects, just a good budget and a good crew.

I'm also involved in World War II re-enactment in SOE [Special Operations Executive] and Camouflage, which, although it doesn't sound relevant, actually used the same techniques. High-quality models were built for aircraft crews to learn their flight routes.

There were even flight simulators using large models on drums, the image being projected onto screens in front of the pilot. These were made with extremely short notice, but the skill sets were available.

Anyway, the main reason for contacting you is regarding the Apollo mission badges [patches]. I'm not sure if this has been noted before or not (I'm hoping it hasn't).

If you look at the Apollo mission badges, all but two have crew names on them. The two badges with missing names are the two most controversial missions: Apollo 11 and

Apollo 13. Why?

Maybe NASA hadn't decided who was trustworthy enough until the last minute. Was Mattingly actually exposed to measles?

I deal with documents relating to older "black ops" and the PWE [Political Warfare Executive] in World War II and have seen how disinformation can be easily spread.

Give a madman the truth and no one will believe it; give a scientist a lie and it will be believed till the end of time!

Mark S., UK

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### **GM Food Fears Confirmed**

Dear Editor: The GM-related article "False Food Fears" [San *Diego Union-Tribune*, 28 June 2015] is misleading,

claiming that there are no studies with evidence that such crops are harmful.

The genetic modification (GM) process of transferring genes from unrelated species into crops formed tomatoes that caused harm; see the <http://tinyurl.com/nbfns5h>.

In addition to having poor taste and abnormal ripening, these GM tomatoes, when consumed, caused a very high incidence of serious gastric dysfunction in mammals. Thus, GM tomatoes are no longer made in the USA.

Use of the GM procedure was intended to increase nutritional content, crop yields, etc. Instead, GM allows farmers to increase their use of mass quantities of glyphosate herbicide, rather than mowing weeds: <http://tinyurl.com/lcd9ak7>.

Glyphosate is taken up by foods due to widespread spraying.

The Royal Society of Canada, the Director of the Board on Life Sciences of the National Academy of Sciences, and scientists at the Food and Drug Administration have stated that it's absurd to claim that GM foods, as opposed to foods produced with traditional breeding, pose no health risks.

The American Academy of Environmental Medicine has called for a moratorium on GM foods.

Further, non-Hodgkins lymphoma incidence in farmers has been correlated with increased herbicide spraying.

There are consequences for choosing risky convenience rather than tradition and safety.

Inserting foreign genes into plants that we are blessed with for food seems ridiculous.

Richard Sauerheber, PhD

San Marcos, California, USA

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### **Unlawful Governments**

Hi Duncan: Re the letter titled "Immunisation Objections" by Carmen (NEXUS June-July 2015, 22/04), I feel that more needs to be done to educate Aussies about the real nature of their "governments" and the straw man, legal fiction scam which has us enslaved to the banksters.

Rupert Murdoch's people won't inform us because he and his ilk are deeply involved in this fraud, so we must rely upon alternative media sources such as NEXUS for our information.

A grounding in where the wheels fell off may be had at [www.basic-fraud.com](http://www.basic-fraud.com), and up-to-date info about the corporate government scam may be found at US websites such as MaineRepublicEmailAlert, RemovingTheShackles and ScannedRetina.

We haven't had lawful, de jure governments in Australia since 1 October 1919, and the present de facto governments are simply foreign-registered corporations that are contracted to the IMF [International Monetary Fund] to provide governmental services on a for-profit basis.

They are working hand in hand with the privately owned (Rothschild) Reserve Bank and the Crown corporation.

To start a political party, as is suggested in the letter, within this fraudulent system is treasonable, and those who see such as a solution are poorly informed (by our Zionist-controlled media), therefore being part of the problem which we face.

Starting a system of common-law people's courts would be a more effective expenditure of energy, and I don't mean in conjunction with members of the Bar, who are greatly responsible for our present enslavement since they knowingly operate under a phony, fictional admiralty-maritime law of the sea.

Bill,

Australia



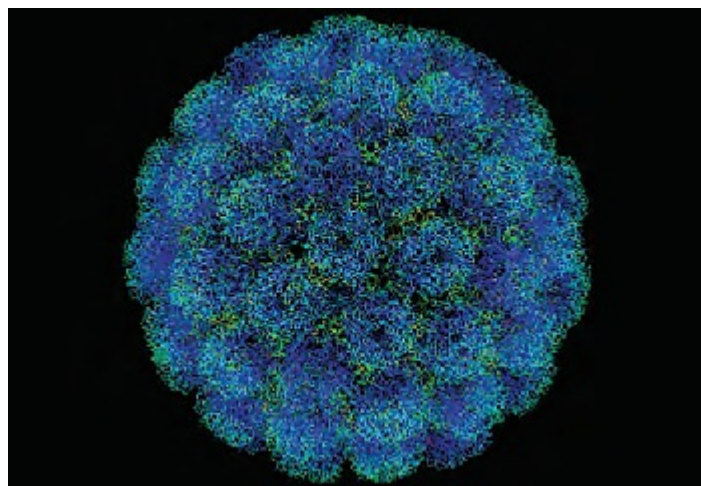


#### **NEW BLOOD SCAN REVEALS EVERY VIRUS THAT'S INFECTED YOU**

Researchers from Harvard and other United States and international medical institutes have developed a quick, inexpensive method called VirScan that can detect the viruses currently infecting a patient as well as those which infected them in the past, all from a tiny sample of blood.

Their research article, titled "Comprehensive serological profiling of human populations using a synthetic human virome", was published in the 5 June edition of *Science* (vol. 348, no. 6239).

To see if a patient has ever been infected by a particular virus, researchers expose antibodies in the patient's blood to molecules with the virus's molecular signature. In the past, researchers could only check a sample for reactions of one type of antibody at a time, whereas VirScan can look for hundreds of antibody reactions at once.



The virus SV40, believed by some to cause cancer in humans.

The researchers tested VirScan on samples from almost 600 individuals from the United States, Thailand, Peru and South Africa. After observing over 100 million antibody reactions, the researchers determined that most people had been exposed to about 10 viruses on average, though a few had antibodies for 84 different viruses.

Interestingly, the researchers also uncovered that the immune system sometimes deploys the same antibodies for different viruses that may look similar or may tailor a sort of universal antibody to block a specific virus.

(Source: *PopSci.com.au*, 5 June 2015, <http://tinyurl.com/nc9pvce>.)

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### **DECRIMINALISATION OF ALL DRUGS HAS WORKED IN PORTUGAL**

Portugal is one of Europe's smallest countries, but until 2001 it had a *big* drug problem. One in 100 Portuguese citizens was addicted to heroin, a shocking statistic that was met with brute force and a zero-tolerance policy by the government. The strict laws meant that anybody caught with drugs, regardless of the amount or what kind of drug, would be prosecuted.

The "War on Drugs" was a battle that the government fought with passion and zeal—but no matter how many people went to prison, it just wasn't working.

"The hard-line approach didn't make people stop using drugs," explains Jose Ferreria, an officer in Lisbon's drug squad. "It's not a fight we can win."

The government realised this and decided to do something that was considered extremely radical. It decriminalised *everything*, allowing citizens to carry small amounts of any drugs, including heroin. The idea was that casual users would be permitted to do their thing, while time, money and resources would be concentrated on helping (rather than prosecuting) addicts.

Portugal now spends 90 per cent of its drug-related resources on treatment and only 10 per cent on policing and punishment. In the USA, it's the reverse.

Fear of going to prison was a huge barrier in terms of addicts coming forward and asking for help, but now they are free to do just that. As a result, heroin addiction has been cut by an incredible 50 per cent, and drug-related deaths in general have also dropped dramatically.

(Source: *TrueActivist.com*, 27 June 2015, <http://tinyurl.com/p9jf5qu>.)

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### **BETTER THAN CASH ALLIANCE: AN ORWELLIAN PLAN**

A group of powerful bankers, political figures and businessmen has converged to promote a cashless society, an economic system that would compel every man, woman and child to utilise proprietary, government-monitored electronic systems to make purchases of any kind.

This group, which calls itself the Better Than Cash Alliance (BTCA), is selling the idea of a cashless society based on the idea that eliminating cash would stimulate entrepreneurship among the poor.

Contrary to the assertions of the BTCA, a cash-free society would limit entrepreneurship to those with the means to incorporate a business, afford the proprietary system required to accept payments, and understand the local, state and federal tax burden that the payment system would create.

Although they won't admit it, the 12 central governments that currently support the BTCA (the US is one of them) do so because a cashless society would enable them to track and tax every purchase made with sovereign currency within their borders. In addition to producing new government revenue streams, the payment systems would increase governments' social engineering capabilities: they would compel consumers to purchase goods and services from taxpaying, licensed organisations.

A number of financial institutions, including but not limited to Citi, Visa and MasterCard, support the BTCA for obvious reasons.

In a cash-free world, these institutions would not only make profits on the front end by selling electronic payment devices and charging a fee for every transaction, they would also make money on the back end by compelling everyone to deposit all of their earnings and cash holdings into their coffers.

The BTCA claims that a cashless society would enable the poor to "participate in the financial system". In reality, it would compel everyone to patronise banks.

And, while a cashless society would be a windfall for the banking industry, it would place a heavy burden on the elderly, who often hold large amounts of cash and are hesitant about (and, in some cases, incapable of) making electronic financial transactions. Among the numerous social problems the BTCA's plan for a cashless society would

create, incidences of elder abuse would certainly increase.

Inevitably, some people would find a way to circumvent a government-mandated electronic payment system, at least for some purchases. Some would find ways to barter or use non-government-issued crypto or de facto currencies. (Interestingly, some black market circles use liquid Tide laundry detergent as a currency.) For some, the elimination of cash would have little material effect on their lives. But, for most, the BTCA's agenda is a tremendous threat to their individual and economic liberties.

(Source: ZeroHedge.com, 4 June 2015, <http://tinyurl.com/oc3boh3>)

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### US POWER GRID HACKED VIA SMART METERS

According to a new report from the US Congressional Research Service (CRS), attacks on the US power grid system are "increasing", with hackers stepping up efforts to penetrate critical systems and to implant malicious software that could compromise the power grid. To quote from the CRS report:



"As the grid is modernized and the Smart Grid is deployed, new intelligent technologies utilizing two-way communications and other digital advantages are being optimized by Internet connectivity. Modernization of many IC [industrial control] systems...also has resulted in connections to the Internet. While these advances will improve the efficiency and performance of the grid, they also will increase its vulnerability to potential cyberattacks. *Black Energy*, *Havex*, and *Sandworm* are all recent examples of malware targeting SCADA systems. New devices (like smart meters) and increasing points of access, introduce new additional areas through which a potential cyberattack may be launched at the grid."

(Source: SmartGridAwareness.org, 24 June 2015, <http://tinyurl.com/qejjdfn>; CRS report, <http://tinyurl.com/ou9hcra>.)

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### HPV VACCINE DEBILITATING THOUSANDS OF GIRLS

When Caron Ryalls was asked to sign consent forms so that her then 13-year-old daughter Emily could be vaccinated against cervical cancer, she assumed it was the best way to protect Emily's health. Emily soon suffered side effects, and the past four years have turned into a nightmare for her and her family.

Emily is one of the thousands of teenage girls who have endured debilitating illnesses following the routine HPV immunisation. She is yet to recover and has no idea when her health will return to normal.

Mrs Ryalls reported Emily's condition to the UK Medicines & Healthcare Products Regulatory Agency (MHRA).

In the 10 years to April 2015, the MRHA received almost 22,000 "spontaneous suspected" adverse drug reaction (ADR) reports in 13 routine immunisation categories including flu, MMR, tetanus, diphtheria and polio, according to a Freedom of Information response released earlier in May.

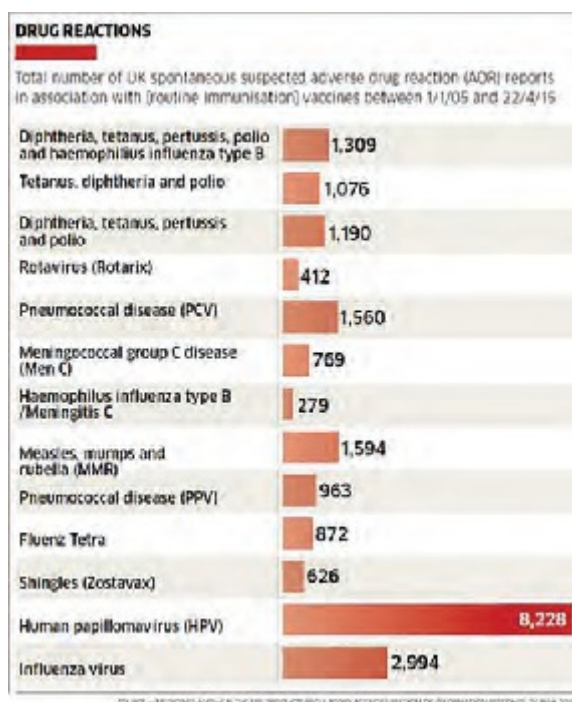
In the HPV category alone, ADRs numbered 8,228, of which 2,587 were classified as "serious", defined by several criteria including whether the ADR resulted in hospitalisation or was deemed life threatening.

The MHRA said that the figures do not reflect the true number of ADRs because of an "unknown and variable level of under-reporting". The agency estimated that it receives about 10 per cent of all reports, suggesting that the actual number of girls suffering ADRs could be in the tens of thousands.

"Every visit to a doctor was met with rolled eyes," said Mrs Ryalls. "Every mention of the HPV vaccination was met with hostility and ridicule."

However, other countries are now taking action following reports of increasing numbers of girls suffering side effects. A Danish TV documentary broadcast earlier this year highlighted the large number of girls who have been affected following their HPV vaccination. Some, like those whom the Ryalls have met in the UK, are wheelchair-bound. Last year, Japan withdrew its recommendation for the HPV vaccine because of reported side effects.

In an article published in May in the Springer journal *Clinical Rheumatology*, Manuel Martfnez-Lavfn, MD, who has been treating people with chronic pain conditions for more than 30 years, said that these illnesses are "more frequent after HPV vaccination". He wrote: ".seemingly inexplicit adverse reactions have been described after the injection of the newer vaccines vs human papillomavirus (HPV). Adverse reactions appear to be more frequent after HPV vaccination when compared to other type of immunisations."



Dr Martfnez-Lavfn said that PoTS [postural orthostatic tachycardia syndrome] and fibromyalgia are among the diseases he believes have developed after HPV vaccination, and that clinicians should be aware of the possible association between HPV vaccination and the development of these "difficult to diagnose" painful syndromes.

Mrs Ryalls and about 80 families in similar situations across the UK are taking action. They have formed the Association for HPV Vaccine Injured Daughters (AHVID) to bring together families with girls adversely affected by the HPV vaccine.

Mrs Ryalls said: "We want to have a stronger voice and we are pushing hard for regional treatment and assessment centres along the lines of Denmark and Japan. We want increased reporting of adverse reactions, better educational support and greater transparency and information to enable parents to make an informed decision regarding consent to HPV vaccination."

The MHRA said that it had no concerns on the numbers of ADRs related to the HPV vaccine and that the "expected benefits in preventing illness and death from HPV infection outweigh the known risks".

The agency said: "The vast majority of suspected side effect reports for HPV vaccine relate to known risks of vaccination that are well described in the available product information. The reporting rate of suspected side effects, which are not necessarily proven to be caused by the vaccine, is influenced by many factors and expected to differ across vaccines. The greater number of reports for HPV vaccine does not necessarily mean that it is any

less safe than other vaccines." (Source: *Independent.co.uk*, 31 May 2015, <http://tinyurl.com/o8wgl3m>.)

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### **VATICAN SIGNS FIRST PALESTINE TREATY AND CALLS FOR TWO-STATE SOLUTION**

Palestine's increased recognition in the international community has continued, with the Vatican signing its first treaty with the "State of Palestine", calling for "courageous decisions" to be made to help end the ongoing Israeli—Arab conflict and secure a peaceful two-state solution.

Israeli officials have condemned the signing of the treaty, saying that the recognition of a Palestinian state is "a hasty step (that] damages the prospects for advancing a peace agreement". The Vatican's Foreign Minister, Archbishop Paul Gallagher, disagreed and urged direct negotiations between Israeli and Palestinian officials to resume in order to work towards a two-state solution.

While more than 130 countries around the world, including Russia, Poland and China, recognise Palestine as a state, many western governments have refused to join the global consensus until fairly recently.

The UN General Assembly adopted a 2012 resolution recognising Palestine as a non-member observer state, despite some protestations from countries such as the US and Canada and abstentions from other western representatives.

Many critics argue that the close nature of Israel's relationship with the US means that many other allied countries are not keen to change their view on Palestine.

A hugely symbolic decision was taken by the UK Parliament in October last year, with the House of Commons passing a non-binding motion calling on the government to recognise Palestine. However, the government under Prime Minister David Cameron has chosen not to follow up on the decision.

(Source: *SputnikNews.com*, 26 June 2015, <http://tinyurl.com/obb9ej6>.)

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### **EUROPEAN COURT OF HUMAN RIGHTS RULES WEBSITES LIABLE FOR USER COMMENTS**

A new ruling at the European Court of Human Rights on the *Delfi AS v. Estonia* case will have serious implications for both freedom of speech and the future of website comments.

In short, websites can be declared liable for things that people post in comments. Previously the Court found that even if a website had taken down comments after people complained, it could still be held liable because it should have anticipated bad comments in the first place.

According to the ruling on the *Delfi AS v. Estonia* case, the website had published what everyone agreed was a "balanced" article about "a matter of public interest" but the website publisher should have known that people would post nasty comments and therefore, even though it automated a system to remove comments that people complained about, it was still liable for the complaints.

The European Court of Human Rights agreed to rehear the case, and everyone hoped for a better outcome this time around—but those hopes have been dashed. First off, the Court insisted that the comments on the news story were clearly "hate speech" and that, as such, "did not require any linguistic or legal analysis since the remarks were on their face manifestly unlawful". To the Court, this means that it's obvious that such comments should have been censored straight out.

The Court then noted that freedom of expression is "interfered with" by this ruling, but it didn't seem to care, saying that it is deemed "necessary in a democratic society".

The Court tried to play down the impact of this ruling by saying that it doesn't apply to any open forum, but it does apply here because Delfi was a giant news portal and thus (1) had the ability to check with lawyers about this and (2) was publishing the story and opening it up for comments.

The Court said that it observes that the Supreme Court concluded that the applicant company had an economic interest in the posting of comments. In the view of the Supreme Court, the fact that the applicant company was not the writer of the comments did not mean that it had no control over the comment environment.

The Court also found that because commenters are anonymous and anonymity is important—and because it's difficult to identify anonymous commenters—then the liability is on the site instead. Further on the question of liability, the Court found that because Delfi's filter wasn't good enough, this exposed it to more liability.

The Court found that because the "victims" of "hate speech" can't police the interwebs, clearly it should be the big companies' responsibility instead.

Finally, the Court said that since the company has stayed in business and is still publishing, despite the earlier ruling, this proves that this ruling is no big deal for free speech.

Things are a bit confusing because the European Court of Justice has actually been much more concerned about issues of intermediary liability, and this ruling contradicts some of those rulings, but since the two courts are separate and not even part of the same system it's not clear what jurisdiction prevails. It is quite likely, however, that many will seize upon this European Court of Human Rights ruling to go after many websites that allow comments and free expression in an attempt to block it. It is going to force many sites to shut down open comments, curtail forums or moderate them much more seriously.

(Source: *Techdirt.com*, 16 June 2015, <http://tinyurl.com/nrh4myw>.)

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## **SMART CITIES: THE NEXT PHASE IN THE 21ST-CENTURY SURVEILLANCE GRID**

by Steven MacMillan © 2015

The century of "big data" will be the century of unprecedented surveillance. The dream of tyrants down through history has been the total monitoring, control and management of the public, with the ability to predict the behaviour of entire populations the most efficient means of achieving this objective. For millennia, this has mainly existed in the realm of fantasy; however, with the vast leap in technology in recent decades, this idea is becoming less a dystopian science fiction movie and more the daily business of totalitarian high-tech regimes.

Most readers are now familiar with the predatory surveillance practices of agencies such as the NSA and GCHQ, which high-level NSA whistleblower William Binney described as "totalitarian" in nature, adding that the goal of the NSA is "to set up the way and means to control the population". Yet many people may not be aware of the next phase in the 21st-century surveillance grid: the "smarter city".

While some promote it as a low-cost and efficient way of managing the workings of a city, others see the surveillance implications of such an initiative as chilling, to say the least.

Smart cities are broadly defined as digitally connected urban areas, filled with ubiquitous sensors, monitors and meters which collect data on every aspect of the city from energy usage to transport patterns. This data is then analysed and used by city planners to "improve decision-making".

Today, more than half the world's population lives in urban areas—a trend that is set to accelerate into the future, meaning that the smart city concept is going to affect the lives of billions of people around the world. India is at the forefront of this push as it plans to build 100 smart cities in the coming years, with Singapore set to become the world's first smart nation. Smart cities are not just confined to Asia, however, as Glasgow, Rio de Janeiro, New Orleans and Cape Town are just a handful of cities involved in IBM's "smarter cities challenge".

### **Privacy in a Smart City**

The global move towards a "smarter planet" is a worrying prospect for many who are concerned with the growing erosion of privacy in the modern world. Can privacy exist in a smart city where every corner and crevice of the urban environment is fitted with digital sensors collecting data on every movement of the city 24 hours a day?

Furthermore, many of the supporters and proponents of smart initiatives are multinational corporations and notorious foundations, including IBM, Siemens, Cisco and the Rockefeller Foundation. The notion of corporate giants managing a smarter planet becomes even more troubling when you consider the history of companies such as IBM, which played a pivotal role in the holocaust and worked closely with Nazi Germany. Given IBM's dark history, should we trust it with the power to regulate and manage numerous cities around the world?

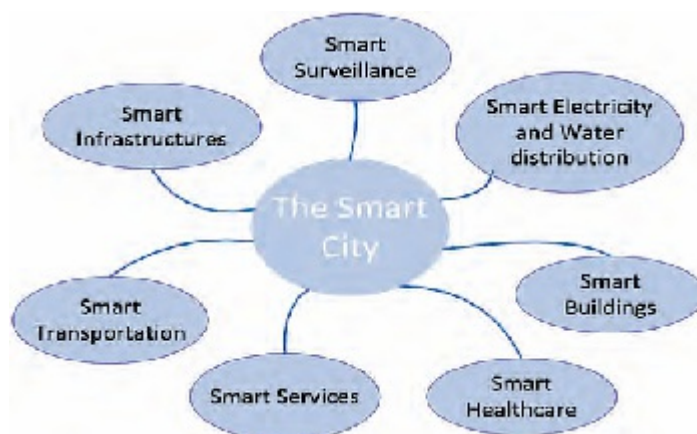
In an article for AlterNet titled "The Terrifying Smart' City of the Future", Allegra Kirkland detailed some of the more disturbing aspects of a smarter planet:

"The surveillance implications of these sorts of mass data-generating civic projects are unnerving, to say the least. Urban designer and author Adam Greenfield wrote on his blog Speedbird that this centralized governing model is disturbingly consonant with the exercise of authoritarianism'. To further complicate matters, the vast majority of smart-city technology is designed by IT-systems giants like IBM and Siemens. In places like Songdo, which was the brainchild of Cisco Systems, corporate entities become responsible for designing and maintaining the basic functions of urban life. . .

". . .Their advocates ignore the fact that private corporations are the ones measuring and controlling these mountains of data, and that they don't have the same accountability to the public that government does."

### Big Data and Predictive Policing

The amount of data generated in recent years has skyrocketed, with IBM CEO Ginni Rometty noting in a 2013 speech that "ninety per cent of all the data ever known to man has been created in the last two years". With this trend only set to continue into the future, the race is now on to develop systems to predict accurately the behaviour of entire populations through scanning copious volumes of data for behavioural patterns.



Smart City Grid (Source: G.R Hancke et al., "The Role of Advanced Sensing in Smart Cities", Sensors 2013; 13(1): 394-425, <http://tinyurl.com/pgdq7oz>)

The Australian Crime Commission is now using big data systems to analyse patterns of behaviour in a quest to predict criminal activities before they occur.

The Los Angeles Police Department has its Real-Time Analysis and Critical Response Division, which uses cutting-edge algorithmic systems and analytics in an attempt to predict future crime.

For two years, British police in Kent have been using a pre-crime software program called Predpol, which analyses crimes based on date, place and category of offence in order to assist police in making decisions on patrol routes.

The ethical and moral questions of the move towards predictive policing are obvious, leading many to fear a potential "tyranny of the algorithm" in the future. With big data being used in the field of law enforcement to surveil and attempt to predict criminal behaviour, you can be assured that intelligence agencies and corporations will be using big data in the futuristic smart city to monitor and predict the behaviour of the city's population.

### Crystal Ball Software

Back in 2010, we had a glimpse into the intentions of the CIA and Google when they funded a start-up company called Recorded Future, an organisation that claimed to have technology that could predict the future through collecting data from the Internet. Recorded Future attempts to scan the entire web, looking for patterns and analysing information on a global scale, with the company's CEO Christopher Ahlberg revealing that the software scans "8 billion data points, [from] 600,000 sources" each week.

As the Internet of Things (IoT) continues to expand in size and scope, producing even more data, demand for companies such as Recorded Future by intelligence agencies and corporations will continue to increase.

Techopedia defines the IoT as a "computing concept that describes a future where everyday physical objects will be connected to the Internet and be able to identify themselves to other devices".

The number of devices connected to the Internet has exploded in recent years, a trend that Cisco detailed in a 2011 report:

"In 2003, there were approximately 6.3 billion people living on the planet and 500 million devices connected to the Internet.

"Explosive growth of smartphones and tablet PCs brought the number of devices connected to the Internet to 12.5 billion in 2010.

". . .Cisco IBSG predicts there will be 25 billion devices connected to the Internet by 2015 and 50 billion by 2020."

Many have voiced privacy concerns over the idea of the Internet being embedded in everything, considering the fact that government agencies and corporate entities have been illegally collecting vast swaths of personal information from the Internet for years.

As Michael Snyder wrote in a recent article: "Could an Internet of Things create a dystopian nightmare where everyone and everything will be constantly monitored and tracked by the government?"

We are truly entering a Brave New World where science fiction is becoming reality. But what input will the people of the world have in the creation of this Brave New World, and what role will representative government play?

#### **About the Author:**

Steven MacMillan is an independent writer, researcher and geopolitical analyst, especially for the online magazine New Eastern Outlook. He is editor of The Analyst Report.

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## **SCEPTICAL DOCTORING VERSUS DOCTORING DATA**

by Professor Peter Saunders © 2015

You can hardly pick up a paper or turn on the radio or TV without being bombarded with advice on how to stay healthy. If you go to the doctor, not only will you get much the same advice, you will often be prescribed drugs of one kind or another, not because you are ill but because your blood pressure or your cholesterol level is too high. If you are a woman, you will be urged to undergo screening for breast or cervical cancer, or prescribed hormone replacement therapy if you are at or past menopause.

If you question the doctor about this, you will probably be told that he or she is following approved guidelines based on scientific research. There may even have been pressure on your doctor to get all their patients to participate.

Dr Malcolm Kendrick is a doctor who has come to be sceptical about this plethora of advice. Some of it is certainly correct; the evidence that smoking is bad for your health is overwhelming. But when he started to look for the evidence to back up many of the other things were told, he found a lot of it ranged from flimsy to nonexistent. Many of the benefits, even where they appear to be real, are so small that they're not worth the effort, especially when balanced against side effects.

The truth is that the experts don't know as much as they would like you to think. Worse, many of them have vested interests in getting you to follow their advice, especially about drugs.

So Dr Kendrick provides what he calls a "truth toolkit": 10 things you should remember when you hear a story about health [see Dr Malcolm Kendrick, *Doctoring Data*, Columbus Publishing, Caldicot, UK, 2015].

**1. Association does not mean causation.** If people who eat more red meat have a higher risk of heart disease, does this mean that eating red meat is bad for your heart? You might think so, because a study from Harvard<sup>1</sup> found that people who eat more red meat have a higher risk of heart disease. And that's how the media reported it.<sup>2</sup> But the study also found that people who eat red meat consume more calories, exercise less and are more likely to smoke.

**2. We are all going to die.** We often read of some new drug that saves lives, when the most it can do is postpone death. So the important question is: "By how much?" Dr Kendrick describes a press release<sup>3</sup> which claimed that treating 10 million people with statins would save about 50,000 lives a year. He points out that a more informative way of putting it is that if 200 people were treated for a year, it would make no difference to 199 of them and the other one would live for a few extra months. (For more on statins, see "Statins for the Healthy Are Harmful"<sup>4</sup> and "The Deadly Dangers of Saturated Fat' & the Superlative Safety of Statins"<sup>5</sup>.)

**3. Relative mountains are made out of absolute molehills.** According to a news report on the BBC<sup>6</sup>, regularly drinking two large glasses of wine or two pints of strong beer a day triples the risk of mouth cancer. That sounds alarming, but only 2.5 out of every 100,000 people in the UK die of mouth cancer. So even if this is cause and effect and not just merely association (people who drink are more likely to smoke, less likely to exercise, and so on), the number of people affected is very small. Three times a tiny number is another tiny number.

**4. Things that are false are often held to be true.** For a long time it was believed that women are protected against heart disease by their sex hormones. Dr Kendrick was unable to find any research to support the idea. The origin appears to be no more than the observations that (a) men are more susceptible than women to heart disease, and (b) the sex hormones are the most obvious difference between the sexes. As a result, many menopausal women were prescribed hormone replacement therapy [HRT] to maintain this protection. In the US, failure to prescribe could constitute malpractice.<sup>7</sup> Eventually a large, controlled study was carried out to measure



the effect.<sup>8</sup> It turned out that the sex hormones were not providing protection. On the contrary, women who were taking HRT were at a greater risk of heart failure and strokes.

**5. Reducing numbers does not equal reducing risk.** High blood pressure is associated with a greater risk of heart disease. But that doesn't mean it is the cause; in fact, there is no evidence that reducing the blood pressure reduces the risk.<sup>9</sup> Yet a drug that can lower the blood pressure below a certain number is considered an effective treatment, with no further check on whether it actually does the patient any good.

**6. Challenges to the status quo are crushed.** When Marshall and Warren argued that ulcers are caused not by stress but by a bacterial infection, they were met with ridicule and hostility—until they were awarded a Nobel Prize. Dr Kendrick suggests three points to bear in mind. First, most experts are only experts in a relatively narrow field. Second, the angrier they are, the more likely it is that they suspect they are wrong. Third, because their reputation, status and income may all be at stake, it is very difficult for experts to change their minds.

**7. Games are played.** He who pays the piper calls the tune, and the pharmaceutical industry carries out or funds an ever-increasing proportion of the research and pays, in one way or another, most of the so-called key opinion leaders.

**8. Doctors can seriously damage your health.** For a number of reasons, doctors tend to be inclined towards more intervention rather than less.

**9. Never believe that something is impossible.** Many people died because the experts claimed that cholera could not possibly be communicated by water or puerperal fever by doctors' unwashed hands. Today we are assured that vaccination cannot possibly be a cause of autism.<sup>10</sup>

**10. "Facts" can be, and often are, plucked out of the air.** It may sound very scientific to be told that we should aim for a body mass index (BMI) between 18.5 and 25, but these are arbitrary figures. What is more, the evidence is that those who are considered overweight (BMI between 25 and 30) live longer than those who are "normal", and even those classed as obese (BMI between 30 and 35) do as well.<sup>11</sup>

#### **About the Author:**

Professor Peter Saunders is the codirector of the Institute of Science in Society (ISIS) and deputy editor of its journal *Science in Society*.

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# So Much More Than Nuclear Weapons

A secret agency called the DVD, allegedly set up in Germany in the 1920s as a coalition between the US Bush family and the "Hitler Project", has been associated with paedophile networks, nuclear weapons funding, the 9/11 attacks and high-level looting.

by Gordon Duff

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## Background

In May of 2014, a high-level informant tied to the US Department of Justice came to us [Veterans Today] with a story. He said that Germany has a decades-long secret protocol with Israel whereby Germany funds weapons research and production for Israel and supplies that nation with submarines specially configured for launching nuclear cruise missiles, and Israel, in return, gives Germany nuclear weapons.

At the time, the "why" of Germany, a NATO power, wanting nuclear weapons wasn't clear. There had to be more to the story, much more, and there was.

What was brought forward was a bizarre tale of Europe's strongest "liberal democracy" being something quite different: a nation ruled by a shadow government, infiltrated by "holdovers" from Nazi Germany, and sworn to bring down the "corrupt West and its effete democracies".

The issues holding the world's attention this week involve not only the nuclear settlement with Iran but Russia's agreement to provide Iran with a "game changing" S-300 air defence system. One glaring inconsistency that has been brought to the forefront is Israel's nuclear program and why it is not subject to sanctions.



What if Israel's nuclear program weren't entirely its own? What if someone else was responsible, not simply the French who supplied the technology but another nation, or, rather, a highly dangerous rogue intelligence agency, a survivor of the conflicts and machinations of the 1930s and 1940s?

In a strange turn of events, a mysterious, even mythical, organisation, the DVD, something right out of a James Bond novel, popped to the surface. Anyone who speaks of the DVD is either ostracised as insane or ends up in prison or dead. We have decided, out of necessity, to take that risk and attempt to give context to our findings.

## The Mysterious Article

Yesterday, Veterans Today received an article published recently in *Die Welt*, written by Colonel Hans Ruhle, former Head of Planning for Germany's Ministry of Defence. It was forwarded to us by a former IAEA (International Atomic

Energy Agency) investigator, a nuclear physicist. What it had to say was both startling and wrought with dramatic implications. The title of the article, published in German, is "Hat Deutschland Israels Atomwaffen finanziert?" ["Has Germany Financed Israel's Nuclear Weapons?"].

Such a detailed and gripping expose written by a retired high-level German-NATO official, one not only proving Israel's elusive nuclear program to exist but outlining broad criminal complicity by the German government, should have resounded around the world. Instead, it was immediately forgotten, never translated into English and never cited by anyone, including and especially those whose job it is to enforce nuclear non-proliferation treaties. The article is, in fact, a broad confession of German government complicity in a bizarre and sinister plot of epic proportions.

### **The Israeli Response**

Almost immediately after we published an annotated version on Veterans Today, the Israeli newspaper *Haaretz* published what we believe to be a response, an attempt to "spin" a very dangerous disclosure into an area that could be "contained". The article is titled "How Israel's Dimona nuclear reactor was concealed from the U.S."

Israel's nuclear program was totally exposed in 1986 by Mordechai Vanunu, later kidnapped and returned to Israel where he was held in solitary confinement for 18 years. The *Haaretz* story was hastily published, an empty and meaningless endeavour because the article exposing the German-Israeli nuclear nexus is something far more than Germany's arming of Israel out of "war guilt". Something very nasty is going on.

### **Deutsche Verteidigungs Dienst**

Earlier this year, a British intelligence analyst and author named Michael Shrimpton was sentenced to prison. He was convicted for informing the British government that a nuclear weapon smuggled from Bremerhaven, Germany, was strategically placed within blast range of the Olympic Stadium outside London during the 2012 Games.

Shrimpton claimed in open court that a German organisation known as the DVD, or Deutsche Verteidigungs Dienst [German Defence Service], a Nazi "holdover" from World War II with "franchises" around the world, was responsible.

Shrimpton was sent for psychiatric examination, pilloried in the press and clearly railroaded into prison on what can only be considered a bizarre "trumped up" charge. He was convicted on the basis of having made the threat himself. Thus, the author of *Spyhunter* and NSA "asset" sits in a prison cell, silenced, allowed no visitors, no phone calls, no correspondence and no publishing privileges.

Shrimpton claims he was "railroaded" because he had exposed the DVD, the Nazi terror group which he says runs Germany but also runs the United States through the Bush family.

### **Christopher Story**

In 2010, Christopher Story, known to many as Edward Harle, died mysteriously. Intelligence insiders believe that Story was murdered by the DVD. From Wikipedia: "Christopher Edward Harle Story FRSA (1938 - 14 July 2010) was a British writer, publisher and government adviser specialising in intelligence and economic affairs, who is perhaps best known for his collaboration with KGB defector Anatoliy Golitsyn on the 1995 book *The Perestroika Deception*."

"Christopher Story, the son of Colonel Henry Harle Story MC of the Cameronians, was educated at Eton College and Christ Church, Oxford, and then worked as an industrial writer in Canada. In 1963, he formed his own publishing company specialising in intelligence and founded 'World Reports Limited' that year.

"Since 1970, Story edited and published *International Currency Review*, which has included the World Bank, the Federal Reserve, and the Bank of England amongst its subscribers. Story became an economic adviser to Prime Minister Margaret Thatcher, and in 1991, a year after her resignation, he published *Soviet Analyst* due to his continued scepticism about Mikhail Gorbachev, perestroika and the official version of events in the Soviet Union. *Soviet Analyst* was a respected journal whose previous editors included Robert Conquest and Tibor Szamuely."

Christopher Story, long-time associate of my good friend Lee Wanta, was an agent of Britain's secret services, something not included in his official biography but true nonetheless. Story, a respected lecturer on global currency issues and intelligence, told of an organisation formed during the late 1920s of a coalition between the Bush family in the United States, then part of the Harriman-Rothschild banking cartel of New York-City of London, and the "Hitler Project", so aptly written about by Webster Tarpley [and Anton Chaitkin] in *George Bush: The Unauthorized Biography*.

According to Story, this group which controlled the Federal Reserve in the United States and the majority of the world's central banks served an agenda of world conquest, both overt and covert. Story cited Hitler as a "puppet" of the organisation that would later be called the DVD. British Prime Minister Edward Heath was a DVD operative, as was Prime Minister Tony Blair and a significant number of high-ranking British politicians.

## The DVD's Paedophile Signature

Paedophile rings have been brought to light, the Westminster Paedophile Scandal in the UK being the most recent of many, and in the US the Franklin Scandal, tying a national child-trafficking ring to the Bush family, dozens of prominent American legislators and major corporate leaders.

It was in the decade of the 1980s when the scope of the problem—the infiltration of the highest levels of governments, particularly NATO nations, by large-scale organised paedophile rings—came to light. The Bush family and the DVD were brought to light by Houston-based journalist Tom Philpott. His 1981 documentary *Boys For Sale* [see <https://www.youtube.com/watch?v=XWY8T3ujxNw>] traces regional child exploitation rings to the highest levels of the US government and the centre of what other informants tell us is the DVD. Philpott's film is termed "The Forgotten Documentary".

## Lee Wanta

Lee Wanta, a long-time friend, was a close confidant of President Ronald Reagan and served as White House Intelligence Coordinator. Wanta's biography *Black Swan, White Hat* tells of his colourful career in counterintelligence and global finance. It also tells of the open war in Washington at that time between those supporting President Reagan and those allied with a European-based group headquartered in the city of Dachau, just north of Munich: the DVD. According to Wanta, the DVD dated back to well before World War II and involved the Bush family and other American "conservatives" who were allied with the Rothschild-owned Federal Reserve System.

While working for Reagan, Wanta accumulated a massive multitrillion-dollar fund intended to end Federal Reserve control of the US, pay off all debts and restore America's infrastructure. While he was in Switzerland under diplomatic cover, investigating DVD operations chief Hans Brand, also known as "Marc Rich", a long-time Clinton confidant, Wanta was kidnapped and imprisoned. Later, Wanta was "extradited" to the State of Wisconsin where he was sentenced to 22 years in prison for "tax evasion", a charge now admittedly fraudulent, almost humorously so.

The funds held in trust in accordance with the Reagan-Wanta-Mitterrand Protocols were looted by DVD operatives working with the Bush family while Wanta was imprisoned. While the courts have ordered the Wanta funds restored, key DVD fronts have petitioned the courts to act as "trustee" to minimise the impact on "world affairs" with this much capital being placed in the hands of a single individual.

What Wanta does confirm is not only the existence of the DVD but that President Reagan saw it as a very real threat and also cited the DVD as fully complicit in the 1981 assassination attempt on him by a Bush family friend, John Hinckley.

## 9/11 Redux

According to Colonel Hans Rühle, identified as a probable intelligence asset of an unknown organisation, Germany went through decades of deceptions including financing what it claimed to be a desalination plant nowhere near a salinated body of water and a massive "textile" complex that never made a napkin. One was the Dimona reactor; the other a weapons-grade plutonium processing facility.

According to Rühle, this decades-long deception that has brought the world to the brink of war time and time again was undertaken by Germany out of "war guilt". Like the phony *Haaretz* story that followed the "framing<sup>1</sup> of the *Die Welt* story, the claim of "war guilt" as a motive for Germany's building an illegal nuclear arsenal for itself using Israel as a "straw man" lacks credibility.

Germany, represented by Prescott Bush (brother of President George H. W. Bush) and Company operated a weapons-grade nuclear enrichment facility in South Africa as late as 2003 and was implicated in the sale of weapons-grade centrifuges to Libya.

Their "agent", DVD operative Johan Meyer, was arrested in South Africa in 2004 but has since disappeared.

In 2014, US Department of Energy documents from 2003 were released, proving categorically that 9/11 was a nuclear event. Subsequent leaks of investigation files from the FBI-Able Danger group establish not only a Saudi-Israeli operations group working out of Fort Lee, New Jersey, as directly tied to the destruction of the triple towers but Israel and significant Bush family operatives as key to the planning of 9/11.

As with the German motive of "war guilt", the motive for 9/11 is generally believed to be the oft-quoted PNAC (Project for a New American Century) call for a new "Pearl Harbor" to justify an American takeover of the Middle East.

As with the German "war guilt" motive, the "Pearl Harbor" motive is both insubstantial and overly convenient. America could have been pushed to war with a car bombing or an assassination. It wasn't necessary to stage 9/11, perhaps the most complex military operation in history.

Few remember that the supposed motive for "bin Laden" to have staged 9/11 was "distress" at the fact that American women had served in Saudi Arabia during Operation *Desert Shield/Storm* and that their presence somehow defiled the holy places of Islam.

Now we may well have another direction to look. Was 9/11 revenge for the systematic murder of over one million Germans by the US between 1945 and 1947 under the Morgenthau Plan? Was it simply slaughter for the sake of slaughter, done on behalf of an organisation that craves entropy and is sworn to serve evil?

### **Evil for Evil's Sake?**

Many times Benjamin Fulford and Michael Shrimpton have come to me with evidence of the mysterious organisation called the DVD. Both seem at times almost fanatical in their opposition to something that no one has heard of. Is it just them, or is such fanaticism a natural response to endemic evil?

A cursory examination of available intelligence on the DVD shows it to deeply parallel the Council on Foreign Relations.

For years, intelligence organisations have stumbled over mysterious secret societies, cults, cabals and cartels. In order to add a sense of unity and structure, terms were developed such as Khazarian Mafia, Bilderbergers, Illuminati, Black Nobility and many others including Dr Preston James's SSD (Secret Shadow Government).

What is known is that what we see—ISIS and its magical unseen allies, a world of rigged elections, manipulated economies and leaderless "empty hat" governments—cannot exist without a DVD. We know it isn't about money; there is nothing left to buy.

Could or would a group exist only to dominate and destroy? Is there some inherent reward in entropy alone? Consider Bush or Blair; consider Cheney or Netanyahu.

Is evil for evil's sake alone so far-fetched?

### **About the Author:**

Gordon Duff is a Senior Editor and the Chairman of Veterans Today and is a regular contributor to the Moscow-based online magazine *New Eastern Outlook*. He is a Marine combat veteran of the Vietnam War. A disabled veteran, he has worked on veterans and PoW issues for decades. He is an accredited diplomat and is generally accepted as one of the top global intelligence specialists.

Gordon Duff manages the world's largest private intelligence organisation and regularly consults with governments challenged by security issues. He has travelled extensively, is published around the world and is a regular guest on TV and radio in many countries. He is also a trained chef, a wine enthusiast, an avid motorcyclist, and a gunsmith specialising in historical weapons and restoration. His business experience and interests are in energy and defence technology.

Gordon Duff's news reports "Is Civil War Coming to America" and "Were US Military Extremists Planning to Topple Obama?", his article "UFO War: Chinese and US Navies off California" as well as an interview with broadcaster George Noory on "Hostile ETs and Interstellar Craft" were published in *NEXUS* 20/01 (December 2012-January 2013). Gordon Duff was interviewed by Skype at the 2013 NEXUS Conference.

For additional reports, see <http://journal-neo.org> and <http://www.VeteransToday.com>. Gordon Duff's YouTube channel is <https://www.youtube.com/user/gpduf>.

### **Editor's Note:**

This article is reprinted and edited with permission from Gordon Duff from his 3 May 2015 posting on the *New Eastern Outlook* website. The original article can be viewed at <http://tinyurl.com/najmt4j>.

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# The Pharmaceutical Deception Exposed

Good health can be achieved through nutrition and positive lifestyle changes, not through reliance on pharmaceutical drugs which don't treat the underlying causes of diseases. Indeed, anticholesterol drugs prevent damaged arterial walls from healing themselves with the very building block they need: cholesterol.

by Azita Vind

© July 2015

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## A Pharmacist's Journey of Discovery

I have spent much of my working life as a devoted patron of the scientific and medical industries. After achieving a double degree in biomedical science and molecular biology, I endeavoured to make a profound difference within the industry for the betterment of the human race.

My passion was virology, and my sights were set on eventually finding a cure for the dreaded flu that has plagued us for centuries. After completing my Honours in the field of viral work, and for my efforts even being recognised with the University of Western Australia's prestigious award for the study of pathology, I began to realise that my labour was to come at a price.

My advances within the scientific community were at the sacrifice of social connections, as I often spent hours working alone in a laboratory. In an effort to rectify the situation, being somewhat of a social addict, I went off to do my Master of Pharmacy. Pharmacists are one of the most highly trusted medical professionals and I soon found myself proud to be among them. I quickly rose through the ranks and became a manager of a busy community pharmacy within only six short months of graduation. I lived and breathed pharmacy and was an utmost devout medical professional, believing in the drugs that I dispensed and the medical counselling that I provided to hundreds of patients daily. There is a drug for everything and I was proud to be a representative for something that was helping millions of people, as I once believed.

Pharmacy quenched my intense thirst to be directly socially connected to those whom I was helping. I formed strong bonds with my patients, and nothing could sway my belief in the positive service I was providing to the community and with the medications that allowed me the power to heal those patients. However, all too quickly I began to realise something that shook the very foundation on which my entire career was based. The medical industry that I was so proudly a part of was not only failing to help people but, it seemed to me, actually harming them.

As a guinea pig of the system, I found myself on multiple medications—much like the patients whom I was treating daily. I had a number of labels handed down to me from doctors, labels that inevitably resulted in my being put on various medications to treat these conditions. As a pharmacist, and even more as a manager, I was working well over 12 hours a day and often 5-6 days a week. I love helping people, and I have known since I was very young that this is my greatest passion. It was the thought that I was helping people that allowed me to get up in the early mornings day after day and work well into the night. However, my own health was starting to deteriorate because of it.

I was on thyroid medication for an autoimmune disease, potent steroid cream for alopecia areata, steroid nasal spray and numerous decongestants for rhinitis. I also suffered from breathlessness, heart palpitations and constant bouts of depression. I had been put through expensive MRIs for cysts in my nasal cavity and EKGs for my heart. For all the medications in the world, why then was I simply getting sicker and sicker?

It wasn't until I was performing a cholesterol challenge in my pharmacy that I woke up to the reality that I was actually unwell. After a lull at the pharmacy, I decided to test my own cholesterol—only to find that it was startlingly high! To take another medication was not an option; I was only 26 years old. There had to be more to it than "simply my genetics", as is often the medical system's excuse for all disease. I promptly quit my job and began utilising my skills as a biomedical scientist to do what I do best: research.

What I found out is perhaps one of humanity's greatest cons. My mission in life has not changed; I endeavour to help as many people as I can to achieve health and happiness in their life. The change, however, comes from how I go about doing that.

No longer am I a devoted medical professional; instead, I am the ex-pharmacist.

## Profits, Not Health

The pharmaceutical industry is a multibillion-dollar one that makes a profit on the population's ability to get sick and stay sick. In Australia alone, the turnover of the whole pharmaceutical industry for 2012-13 was over \$23 billion (IBISWorld, 2013)! I was a victim of the medical industry and found myself a "drug addict", too indoctrinated to question the diagnosis and medications handed down to me by medical professionals.

It is something I saw every day working in the pharmacy. Overweight, depressed and chronically ill patients flooded the pharmacy day after day, feeding addictions of illness for which a cure would never be found. However, it has come to my understanding that the very medications they take are the poisons that keep them profoundly ill.

After implementing discoveries from my research regarding whole foods and water, I have been able to reverse each and every one of my medical conditions. I am thankful to say that I am off all drugs and finally can claim the title of "healthy".

My cholesterol was back within normal ranges within six months and I managed to reverse all other conditions such as my depression, although that took slightly longer to reverse (roughly eight months). My current blood tests reveal that my thyroid condition, for which I had been medicated for over a decade and which I was told was irreversible, has also reverted to normal ranges.

These medical "miracles" are all thanks to the significant lifestyle changes I implemented following months of researching "lifestyle" information. The unfortunate thing about this is that what I did to revert my body to its pristine, healthy self would cost virtually nothing.

There is no patent that any pharmaceutical company can have on water, fresh foods and whole food supplements. Therefore it would not be financially in the best interests of the medical community at large to recommend that this information be internationally broadcast, although it is readily available to those who seek it out. It is now becoming more and more sought after to prevent medical complications and disease instead of using medication. Unfortunately, our society is still very quick to seek the advice of a system that will eventually lead them into disease.

### **In Poison We Trust!**

The truth of the matter is that all medications are poisons and are regulated as such under the *Poisons Act 1964* (in Western Australia). The sad deception is that we are conditioned to accept the multitude of toxic effects caused by these drugs under the more appropriate name of "side effects". When we ingest a poison, there are only *effects*; there is no such thing as a *side* effect.

The actual "treatment" is simply a residual effect from the ingestion of this poison that happens to mask a body system process that was set in place for a reason by the innate intelligence of the body. That is, when the body is undergoing some sort of stress it must overcompensate in order to establish proper functioning in the body. Stress comes to the body in various forms including toxins that we consume in food and drink, toxins that we absorb through our skin in the form of skin creams, hair solutions and make-up, and toxins that we produce from our thoughts, among many other forms. These toxins lead to tissue damage, and the body must compensate for these things that we see as a disease state of the body. In reality, these "disease states" are simply coping mechanisms created by the body in order to resist the constant attacks presented daily by these toxins.

The medical system has quickly learnt to turn this ignorance into a profiteering expedition. Instead of addressing why the body needs to compensate in the way that it does, it simply recommends taking a toxic poison—where one of its effects will be to reverse the symptom of body distress without our ever having to change the causative toxic situation that transformed our body in the first place.

### **Bad Cholesterol? There's No Such Thing!**

According to *Australian Statistics on Medicines 2010*, published by the Australian government, atorvastatin was the most commonly prescribed drug. This is a class of drug known as a "statin", often prescribed to deal with "cholesterol issues".

The common theory often reported by the government (or government-approved institutions) is that high cholesterol is one of the leading causative factors in heart disease and heart attacks (US NHLBI, June 2005). Therefore it is imperative, according to government recommendations, that high levels of anticholesterol medications, like atorvastatin, be prescribed to help reduce this risk.

The only issue here is that cholesterol is integral to fixing the damage in the body's arterial system caused by toxic damage from ingested poisons. There is no such thing as harmful cholesterol! If cholesterol were simply a by-product of saturated fatty diets leading to a coincidental build-up on arterial walls, then it would actually stand to reason that all our veins would also become blocked with cholesterol.

Our veins allow blood to move slowly through them as they rely on a flow mechanism, compared with the high pressure of blood flow in the arteries that is produced from each heartbeat. This means that if cholesterol simply

built coincidentally in the arteries due to there being too much in the blood (caused by overeating of highly saturated foods), then our veins, which have blood slowly flowing through them, would give cholesterol a lot more time to bind to their walls and cause blockages. However, this is not the case. There has never been a cholesterol blockage found in the veins of a patient (Handler and Coghlan, 2007). Not *ever!*

Cholesterol is there for a reason, although many medical articles, books and journals still state that it is "unknown" why cholesterol blocks arteries.

Cholesterol is one of the most important products of the body. It is a vital building block for all the body's cells (Barton, 2005) as well as one of the integral components needed to manufacture many of our life-supporting hormones (Champe *et al.*, 2005).

The reason why cholesterol is strategically placed in our arteries is to repair the cellular lining that has been damaged from things like ingested *trans* fats (the highly heated, damaged fats that we see on every supermarket shelf and in all margarines), toxins and dehydration. Its presence in the arteries was never an accident (Kaskel and Kaskel, 2014). Toxins in the body and dehydration produce nicks in the artery system, which can cause tissue to tear off due to the immense pressure with which the blood flows through and dangerous leakages of blood into the extracellular tissues.

In order to prevent this tissue damage, the body coats these injured points with cholesterol, which also serves to conserve water when the body is in a dehydrated state (Batmanghelidj, 2008). The body has innate intelligence to repair broken arterial walls with the use of cholesterol. The medical industry has ingeniously demonised this process, allowing the pharmaceutical industry to profit as a result.

### **The Body's Innate Intelligence**

The body is innately intelligent, performing functions that serve our higher good without the use of our conscious thought. An example of this innate intelligence occurs when we cut our skin. We do not consciously have to direct platelets to the area or fibrinogen to close the wound. Nor do we direct our immune system to combat invading pathogens that can now breach the epithelial surface or, indeed, the epithelium itself. All this happens innately throughout the higher, preset intelligence of the body's systems. This can be said for many of the so-called disease states of the body. Often our body is working to alleviate a much broader medical issue that we have caused with our systems through the bombardment of toxins and lack of nutrition.

Much work has been done within the scientific community to establish the primary cause of disease, which arises through environmental challenges that we apply to our body, often voluntarily through the foods we eat and the toxic products we use. This field of science is termed *epigenetics* and has been around since the early 1980s, although many scientists and medical professionals still remain ignorant of it.

In the example of cholesterol, we can see that it is the damage to our arteries (from things such as toxins derived from some foods and lack of hydration) that causes the body to heal using cholesterol. The medications that we take to reduce this cholesterol do nothing to treat the underlying threat that has caused the body to create this patch-up system in order to survive.

As well as this, we incur a myriad of toxic effects that these drugs have in the body, such as an increased risk of dementia, rhabdomyolysis (muscle wasting), headaches, insomnia, renal failure, amnesia, toxic epidermal necrolysis. the list goes on and on (AMH, 2012).

It is unsurprising that such a "safe" drug, as it is considered in the medical community, can cause such startlingly horrific effects when we consider that every single cell in the body relies on cholesterol in order to function. What's even more unfortunate is that we are now encouraging doctors to prescribe these statins to patients who don't even have high cholesterol. This has now become routine and is one of the contributing factors to atorvastatin's being the most readily prescribed drug—as well as one of the most profitable—on the market.

### **From Blind Faith to Empowerment**

It is a scary new world we live in where one blindly trusts the medical profession simply because of one's own ignorance and fear. I had over eight years of university education and still fell victim to the system, much like many other medical professionals in the industry.

It is my belief that medical professionals do not willingly seek to harm the patients under their care; any harm they cause is simply a by-product of the perpetuated ignorance that is now commonplace throughout society.

Anticholesterol medications, such as atorvastatin, are just one of the drugs that are routinely overprescribed to the detriment of society. There are thousands on the market, with more being added routinely each year. All of these poisons do not address the reason why the disease state occurs; they simply mask the body's signalling system that tells us that something is wrong, and allow us to live the convenient, yet deadly, lifestyles to which we are now accustomed.



For those who choose to question the medical industry, there is ample information available. Reversal of every medical condition known to humankind is completely within everybody's reach. After all, if you are faced with a disease, the chances are that it was the environment to which you exposed your body that resulted in such a disease.

With this in mind, it is therefore under your complete control to reverse these conditions and re-establish your health through significant lifestyle changes, just as I did in my own case and as I have seen many others do with significantly worse conditions.

It takes courage, intelligence and motivation to question a medical system that has conditioned us to live in fear of its rejection. For those who do question, welcome to a brand new world where health is finally a reality!

I am now proud to be the ex-pharmacist, scientist and wellness advocate who encourages people to make profound life changes that inevitably result in restoration of their body's innate intelligence and health.

I am also proud to be part of the team of teachers and researchers for the Australian Institute for Body Electronics, whose system of body regeneration supports the body's innate ability to repair itself and speed up the process of cell regeneration, the building block of the entire body. Our motto is "Liberation through Education".

#### **About the Author:**

Azita Vind, BSc (Hons), MPharm, is a former pharmacist turned wellness specialist, based in the Perth region of Western Australia. She has spent the last 10 years studying spirituality, meditation, nutrition and angel therapy, and through Ze Life she offers The Catalyst Experience, a two-hour power adventure designed to kick-start the journey to wellness and happiness.

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# Aluminium Poisoning By Clandestine Geoengineering

The key ingredient in a covert planetary geoengineering project to counter alleged global warming is coal combustion fly ash. Its dispersal liberates highly mobile aluminium, believed to cause widespread neurological diseases and environmental damage.

by J. Marvin Herndon, PhD

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In response to an urgent call through an article in *Current Science* for assistance to understand the geological association of high aluminium [aluminum] mobility with human health in the Ganga Alluvial Plain, I describe evidence of clandestine geoengineering activity that has occurred for at least 15 years, and which has escalated sharply in the last two years.

The geoengineering activity via tanker-jet aircraft emplaces a nonnatural, toxic substance in the Earth's atmosphere which with rainwater liberates highly mobile aluminium. Further, I present evidence that the toxic substance is coal combustion fly ash. Clandestine dispersal of coal fly ash with the resulting liberation of highly mobile aluminium, I posit, is an underlying cause of the widespread and pronounced increase in neurological diseases as well as the currently widespread and increasing debilitation of Earth's biota. Recommendations are made for verifying whether the evidence presented here is applicable to the Ganga Alluvial Plain.

In their article entitled "High mobility of aluminium in Gomati River Basin: implications to human health", Jigyasu *et al.*<sup>4</sup> state: "Systematic multi-disciplinary study is urgently required to understand the geological association of high Al [aluminium] mobility with human health in the Ganga Alluvial Plain, one of the densely populated regions of the world." The present article is intended in part to address that urgent call.

Life on Earth came into being and evolved under circumstances of extreme immobility of aluminium, an element that comprises by weight about 8% of the crust. Consequently, the biota of our planet, including humans, failed to develop natural defence mechanisms for exposure to chemically mobile aluminium.

Globally, for the past decade or more, with dramatically increasing intensity, our planet is being deliberately and clandestinely exposed to a non-natural substance which releases toxic mobile aluminium into the environment. Here I provide evidence on the dispersal and nature of the non-natural substance, describe its potential causality in a host of increasing human<sup>2-11</sup> and biota debilitations<sup>12</sup>, and discuss the implications for India in light of recently published extreme levels of chemically mobile aluminium observed in water from the Gomati River, a major tributary of the Ganga River in the Ganga Alluvial Plain in North India.<sup>1</sup>

The "global warming" agenda had its beginnings in the 1980s, especially with the 1988 formation of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations. The first report by the IPCC in 1990 claimed that the world has been warming and that future warming seems likely, the supposed culprit being anthropogenic additions to the atmosphere of carbon dioxide (CO<sub>2</sub>), allegedly causing a "greenhouse" effect.

Then, along came the modellers, with grand climate models based upon the false assumptions that heat from the Sun and heat from within the Earth are both constant. With those predominant variables unrealistically held constant, the tiny greenhouse effect of increases in carbon dioxide might appear significant. The intended result of those climate models is to demonstrate that human activities are indeed causing global warming and that the consequences are dire, threatening our entire planet and its very life-forms.

Driven by political, financial and self-aggrandisement interests, the idea of anthropogenic global warming/ climate change took hold. But there is another explanation.<sup>13</sup>

Since 1996, the IPCC in its reports has mentioned the possibility of "geoengineering", the idea of emplacing reflectant substances into the upper atmosphere (stratosphere) to reflect a portion of the incident sunlight back into space to compensate for alleged anthropogenic global warming. The impetus for that geoengineering idea is the observation that, after a major volcanic eruption, ash can remain in the stratosphere, where little mixing occurs, for a year or more, dimming incident sunlight and lowering temperatures globally.

There is much information and evidence on the Internet and in books that clandestine geoengineering activities have been taking place for years, perhaps going back to at least as early as the beginning of the 21st century. Notably and alarmingly, profound increases in geoengineering activity have been observed since early 2013.<sup>14-16</sup>

But there has been no public admission, no understanding, no academic investigations, no informed consent, and no disclosure as to the nature of the toxic substances being dispersed into the air. Instead, there appears to be a systematic pattern of disinformation: efforts to brand concerned observers with the pejorative moniker "conspiracy theorists" and to imply falsely that the observed geoengineering toxic chemical trails are simply the formation of ice crystals from the exhaust of commercial jetliners flying at high altitudes.<sup>17</sup>

I have lived in the same house since 1977 and viewed the same area of the sky nearly every day. After the morning marine layer burns off, the sky in San Diego, California, USA, has been often cloudless; rain is infrequent here. The air is warm and dry, not at all conducive for the formation of ice crystals from high-altitude jet aircraft exhaust. Since the spring of 2014, I had observed that the common occurrence of toxic geoengineering trails in the lower atmosphere (troposphere), which mixes with the air we breathe, was increasing in frequency (figures 1 and 2 below).



Figure 1: Clandestine geoengineering toxic chemical aerosol trails early in the daily emplacement activity in San Diego, USA, on 8 August 2014. The trail from the tanker-jet dissipates, first forming wispy white "clouds" as shown, and eventually forms a white haze.



Figure 2: Multiple clandestine geoengineering toxic chemical trails above a recognisable area of San Diego, Kearney Mesa, on 16 January 2015.

By November 2014, the spraying from tanker-jet aircraft had become a near-daily occurrence, sometimes to the extent of causing the otherwise blue sky to be completely overcast with artificial clouds (figure 3 below).

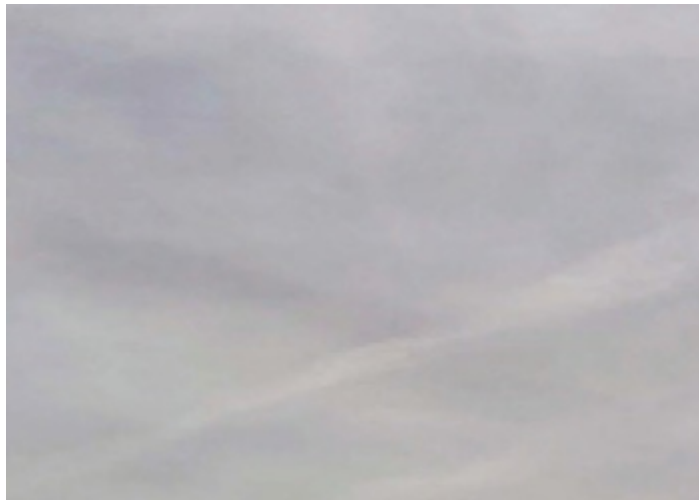


Figure 3: Heavy jet-tanker toxic chemical emplacement by clandestine geoengineering activity on 23 November 2014 over San Diego. Initially the sky was pure blue on that day, devoid of any natural clouds. The toxic material does not remain in the atmosphere but contaminates the air breathed by San Diegans, the rain and the soil.

Disturbingly, the Mayor and Chief of Police, San Diego, issued no health warnings, even to the most at-risk members of the community: children, pregnant women, the elderly, and those with compromised immune and respiratory systems.

If natural volcanic ash were used for geoengineering, which is not the case, it would not be without health risks; acute respiratory conditions such as shortness of breath, wheezing and coughing have been noted as well as irritation to the eyes and nasal passage.<sup>18</sup> But to my knowledge, release of mobile aluminium into the environment does not occur from natural volcanic ash.

Mining and milling rock to produce artificial volcanic ash in sufficient quantity, 10-12 million tonnes/year, to implement a full-scale geoengineering program to cool the planet would be outrageously expensive. Artificially produced chemicals would likewise be prohibitively expensive, except for peripheral clandestine use in weather modifying/weaponising experiments.

There is, however, a readily available, almost unlimited amount of an extremely low-cost waste product with proper grain size for aerosol dispersing: coal fly ash, which makes up the second largest industrial waste stream of the United States economy.

Although details of the government's massive tropospheric geoengineering activities are secret, and even unacknowledged to date, as described below there is reason to believe that coal fly ash is the principal ingredient used for geoengineering.

Coal burning by industries in the West, mostly electric utilities, produces heavy ash that settles out, as well as fly ash that earlier went up the smokestack into the atmosphere but is now captured and stored because of its well-known adverse human health effects and damage to the environment. Coal fly ash poses danger as a stored waste because water leaches out toxic elements.<sup>19</sup> Leaching experiments on coal fly ash are typically aimed at understanding/mitigating chemical mobility caused by groundwater.<sup>20 21</sup>

Moreno *et al*<sup>20</sup> investigated laboratory leach behaviour of 23 coal fly ash samples from different European power plant sources. The selection covered most of the coal fly ash types produced in the European Union. All except one were collected at electrostatic precipitators.

The leach procedure employed required mixing 100 grams [g] of coal fly ash with one litre [L] of distilled water in two-litre bottles for a period of 24 hours. The authors reported the abundance of 38 elements in the leachate, including radioactive uranium and thorium, and, of particular interest here, aluminium, barium and strontium. Together, aluminium, barium and strontium appear to be the fingerprint of the principal clandestine geoengineering toxic substance.

During the period between July 2011 and November 2012, 73 rainwater samples were collected and analysed for aluminium and barium; 71 were collected from 60 different locations in Germany, one sample was collected from France and one from Austria. Aluminium was detected in 77% of the rainwater samples, at an average concentration of 17.68 yg/L. The average barium concentration was found to be 3.38 yg/L. Strontium, with an average composition of 2.16 yg/L, was also observed in 23 rainwater samples.<sup>22</sup>

To my knowledge, there have been no leaching experiments on coal fly ash that has been exposed to conditions such as one might expect from atmospheric aerosol dispersal, like exposure to UV light, particle contact abrasion or electrostatic discharge. In one set of rainwater measurements in a non-industrial area of northern California, rainwater collected during an electrical storm contained 3,450 yg/L of aluminium, whereas similar sampling 10 days earlier yielded 850 yg/L of aluminium<sup>16</sup>; the difference may or may not have anything to do with electrical discharge.

Figure 4 (below) shows measurement of aluminium content of collected rainwater samples from 2001 to 2014.

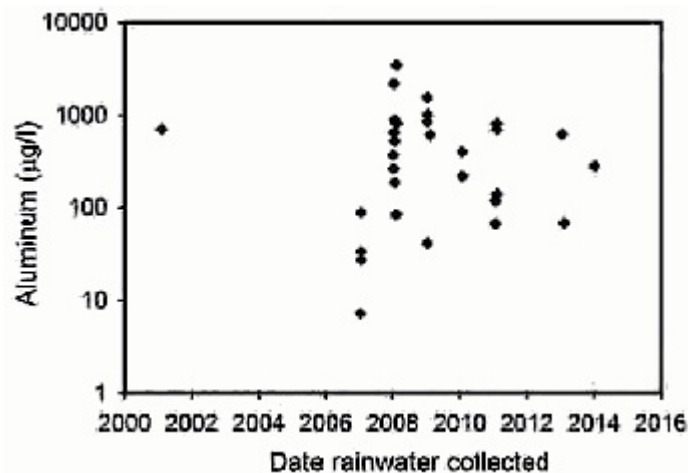


Figure 4: Aluminium content of captured rainwater samples as a function of date collected. The gap between 2002 and 2006 does not indicate an absence of clandestine geoengineering; numerous photographic data are available during that interval.

Generally, the samples were collected by independent scientists who paid the analytical laboratory fees out of their own pockets, hence the paucity of data; government-supported academic scientists either have not made comparable measurements or else have not published them. Rainwater evaporation concentrates the aluminium content. In one lined pond fed by rainwater and well water with undetectable aluminium content, the aluminium concentration of the pond water was found to be 375,000 yg/L.<sup>16</sup>

Through the use of ratios, it is possible to compare directly the composition of rainwater with the composition of coal fly leach experiments. Figure 5 (below) is a side-by-side comparison of aluminium to barium (Al-Ba) weight ratios of rainwater<sup>16, 22</sup> and coal fly ash leachate.<sup>20</sup>

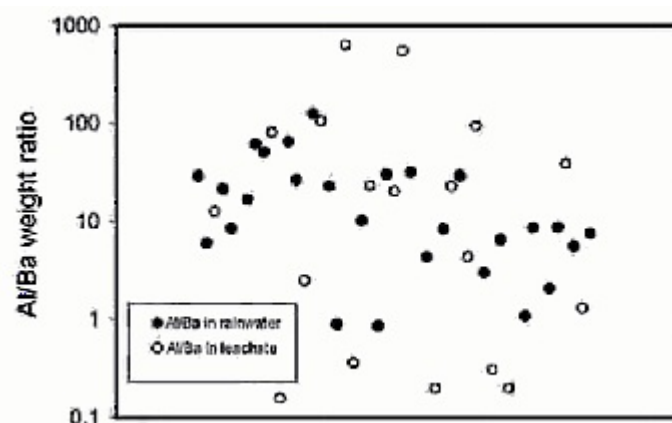


Figure 5: Fingerprint similarity in Al/Ba ratio range between post-geoengineering rainwater and coal fly ash leachate.

The range of Al-Ba values for the rainwater and coal fly ash leachate is virtually indistinguishable, even though the rainwater samples were collected at different times, in different locations and under different degrees of toxic aerosol emplacement, and the coal fly ash samples varied by location and composition.

Figure 6 (below) is a side-by-side comparison of strontium to barium (Sr-Ba) weight ratios of rainwater<sup>16, 22</sup> and coal fly ash leachate.<sup>20</sup>

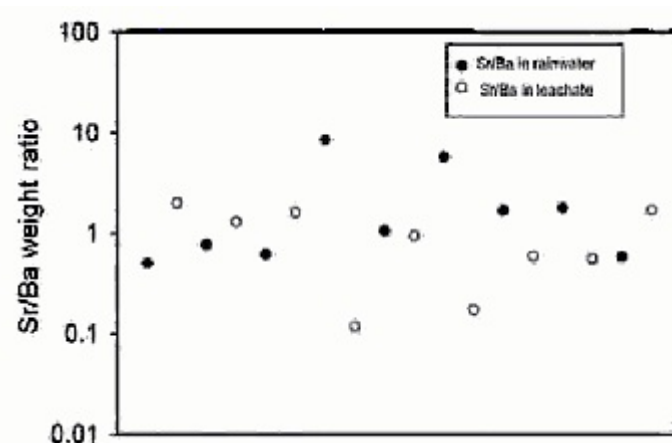


Figure 6: Fingerprint similarity in Sr/Ba ratio range between post-geoengineering rainwater and coal fly ash leachate. Placement on the horizontal axis is arbitrary to spread out data points.

The range of Sr-Ba values for the rainwater and coal fly ash leachate is virtually indistinguishable, even though the rainwater samples were collected at different times, in different locations and under different degrees of toxic aerosol emplacement, and the coal fly ash samples varied by location and composition.

The data presented above constitute evidence that coal fly ash is the principal material employed in clandestine geoengineering activities for a period of at least 15 years in America and for unknown periods in Western Europe, New Zealand and perhaps elsewhere.

Such clandestine geoengineering activities have exposed humanity and Earth's biota to highly mobilised aluminium, a toxic substance not generally found in the natural environment and one for which no natural immunity had evolved. During the period of coal fly ash utilisation for clandestine geoengineering, aluminium-implicated neurological diseases including autism, Alzheimer's, Parkinson's, ADHD and others showed explosive growth profiles<sup>2-11</sup>, and there was manifold destruction of plant and animal life.

Highly mobilised aluminium from the geoengineering-dispersed coal fly ash, I posit, is the cause. How can that

assertion be verified? In principle, one might show a correlation between the amount of coal fly ash emplaced into the atmosphere for geoengineering and the occurrence of aluminium-implicated neurological diseases. It is unlikely, though, that the clandestine coal fly ash geoengineering data will ever be forthcoming.

After President Obama was sworn in for a second term in office on 20 January 2013, geoengineering activities escalated sharply, becoming a near-daily occurrence in many parts of America.<sup>14-16</sup> If coal fly ash geoengineering activities are the principal cause of aluminium-implicated neurological diseases, then there will be a sharp spike in their occurrences after 20 January 2013— proof, albeit horrific proof, of crimes against humanity and Earth's biota of a magnitude and severity never before experienced.

The Ganga Alluvial Plain, as shown in figure 7 (below), abuts the Himalaya Mountains, a natural barricade to the passage of clouds.

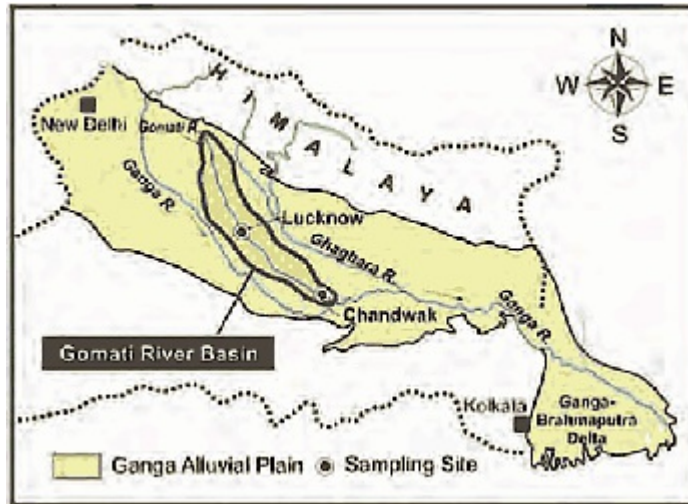


Figure 7: Location map of the Gomati River Basin. (Courtesy: Jigyasu et al.<sup>1</sup>)

Seasonally, as discovered by Jigyasu *et al.*<sup>1</sup>, rainfall delivers toxic quantities of highly mobile aluminium to the Gomati River Basin (figure 8 - below).

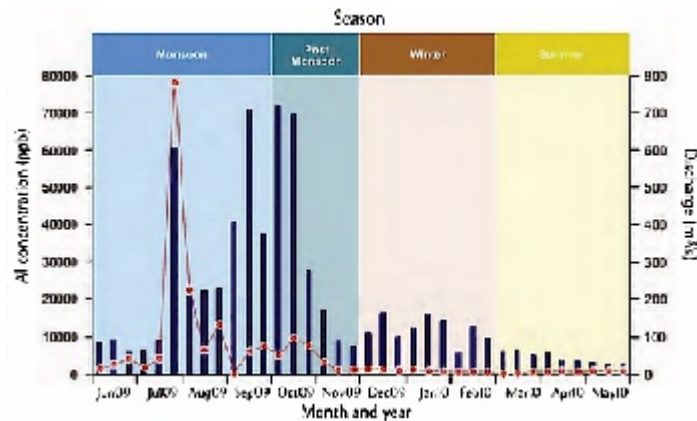


Figure 8: Seasonal distribution of dissolved Al concentration along with discharge in the Gomati River water at Chandwakh. (Courtesy: Jigyasu et al<sup>5</sup>)

I suggest that the primary source of highly mobile aluminium is aerosolised coal fly ash. This suggestion is relatively easy to verify by taking rainwater samples and analysing them for aluminium, barium and strontium. If aerosolised coal fly ash is indeed verified as the major source of highly mobile aluminium, then another more difficult question should be addressed: what proportion of the aerosolised coal fly ash derives from clandestine geoengineering activities and what proportion comes from industrial coal burning in India?

One forensic approach that should be considered is direct sampling of the coal fly ash in the monsoon clouds and in the clouds before they enter the Indian airspace. These samples may then be compared with the Indian industrial coal fly ash samples. Although the abovedescribed forensic investigation may be difficult and expensive, the results might help India improve the health of its citizens .

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Dr Herndon is most noted for deducing the composition of the inner core of the Earth as being nickel silicide, not partially crystallised nickel-iron metal. More recently, he has suggested "georeactor" planetocentric nuclear fission reactors as energy sources for the gas-giant outer planets and as the energy source and production mechanism for the geomagnetic field and stellar ignition by nuclear fission. In 2005, he postulated "whole-Earth decompression dynamics", a unified theory combining elements of plate tectonics and Earth expansion. He is the author of *Maverick's Earth and Universe* (Trafford Press, 2008), *Herndon's Earth and the Dark Side of Science* (CreateSpace, 2014) and numerous scientific papers.

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# Health and Survival in a Radioactive World

Low-level radiation emitted from nuclear power plant operations, leaks and accidents is implicated in cancer, weakened immunity, infectious diseases, genetic damage and infertility. A healthy diet with essential minerals can help prevent the uptake of radioactive elements.

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Extracted and edited from Sara Shannon's book *Radiation Protective Foods*

The Fukushima disaster of March 2011 was a turning point in human history. After my years of research and concern about nuclear power and radiation damage to health, the main point I would like to convey to the reader is the gravity of the danger we face at this moment.

Damage to all life from the usual radiation releases from nuclear power plants was serious enough, but now we have arrived at the do or die moment, and it is up to us to take steps to protect ourselves and to change the path we are on.

## Radiation In The Environment

What I am addressing is the danger of radiation in the environment now. Even if we did succeed tomorrow in stopping all nuclear weapons production and closing all nuclear power plants, we would nevertheless be faced with the monumental task of cleaning up tons of radioactive waste that have accumulated over the years—from atmospheric and underground bomb testing, waste storage sites, and research and industry. The world's nuclear plants will be sources of radioactive contamination for thousands of years after their useful life of 30 years.

Men and women lived in equilibrium with natural low-level radiation in the environment up until the last years of the 19th century, when X-rays were discovered. Although it was observed that this form of radiation could have a devastating effect, the early use of X-ray machines went unchecked in medicine. Very little research was done on the negative medical impact of X-rays until the mid-1940s. Much has been learned since then, but not until the early 1970s was the full import understood. In addition to X-rays, several other sources of low-level radiation have been developed in the last few decades, resulting in a risk of damage to our health from low-level radiation pollution.

The role played by low levels of radiation in the human body has attracted an increasing amount of attention as the use of nuclear power has increased throughout the world. Its potential effects include several types of cancer, leukaemia, harmful genetic mutations, mental impairment and foetal and infant deaths. Protection against ionising radiation becomes more important not only as we become more dependent on nuclear energy, but also as nuclear medicine and technology advance.

Fortunately there are ways to prevent the assimilation of radioactive substances by the human body, and ways to get rid of them once they have been taken up by the body. Foods that have particular protective properties are the secret to helping us to live with radiation. Over 2,000 years ago, Hippocrates summed up what's largely been forgotten: "Let your medicine be your food, and your food be your medicine." It sounds too simple.

But it is true. The fact that we *can* protect ourselves from the health-destroying effects of low-level radiation is not generally known. No previous synthesis of the information from the point of view of nutritional status has been made. The nuclear-age diet, which is based on traditional whole foods, grew out of years of research and can help to make you as radiation-resistant as possible.

The highest possible state of health is the best available security for the nuclear age. The Radiation Shield plan is based on two principles: the principle of selective uptake and the principle of the healthy survivor.

## The Principle Of Selective Uptake

Radioactive elements often behave like similar non-radioactive elements.

The principle of *selective uptake* is based on the demonstrable biological fact that when our cells are saturated with the nutrients they need, there is less chance for radioactive elements to move in. But if our diets are deficient in vital nutrients such as calcium and potassium for an extended period of time, our uptake of their radioactive counterparts is increased.

## Similar Elements Have Similar Properties

Many elements are quite similar in structure to one another. Elements are placed into groups in the periodic table determined by the number of electrons orbiting in the outermost shell of their atomic structure. These outermost electrons (which are known as *valence* electrons) enter into chemical reactions. Elements within each grouping (or "period", or, one could say, "family") react chemically in similar ways.

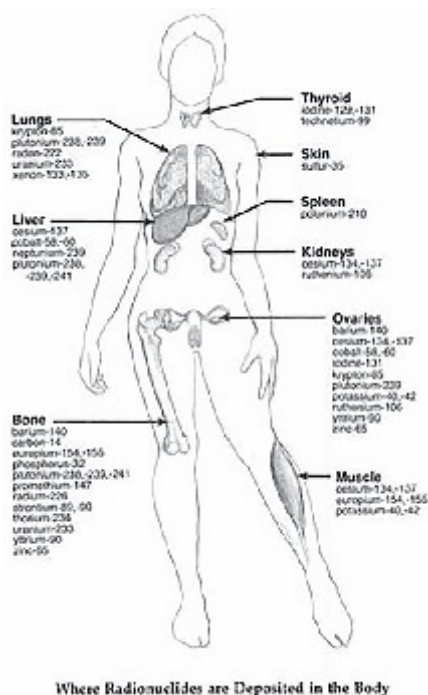
In place of the specific element it actually needs, the human body may pick up a "similar" element in the same group. This is central to the concept of selective uptake. A listing of the elements in groups corresponding to the periodic table shows which elements the body may use when the needed nutrients are not available [see pages 93-94 of the book].

The body's survival mechanism tends to grab the things we need for normal functioning and health. When an element is lacking, the body takes up a similar element that is available. For example, strontium is quite similar in structure to calcium (they are in the same group in the periodic table). Strontium-90, a radionuclide that is found in all nuclear fallout and power plant emissions, and calcium can enter into the same types of chemical reactions. Thus, the human body uses them in the same way, primarily to strengthen bones and teeth.

Fortunately, however, the body is selective. Normal (that is, non-radioactive) elements have priority. When non-radioactive elements are available, the body tends not to absorb the radioactive ones. The situation can be likened to that of a baseball team that has runners on base. The team is more likely to come out ahead when the bases are loaded; it's better to have runners on first, second and third than it is to leave any bases unoccupied. If all of the positions are already occupied by calcium, then strontium will be prevented from going there. Deficiencies are what lead to the uptake of radioactive elements.

### Selective Uptake and Specific Organs

When radioactive substances are taken up by the body, they tend to accumulate in various tissues and organs [see figure below, from page 95 of the book].



We have seen that if there is not enough calcium in the body, and calcium is not readily available, the body will pick up strontium-90 (or other radioactive elements that are similar to calcium, such as barium-140 and radium-226) and deposit it in the teeth and bones. Once deposited, strontium irradiates nearby cells. It can reduce normal function immediately, and lead to the development of cancer in the future.

Caesium-137, another one of the long-lived fission products found in all nuclear fallout and power plant emissions, is a radionuclide in the same group as potassium. Taken up by the body when potassium is lacking, caesium becomes concentrated in the muscles and reproductive organs, particularly the ovaries.

(Radioactive forms of potassium, potassium-40 and potassium-42 also concentrate in these areas of the body.)

In April 1974, the journal *Health Physics* published an article that noted: "...detailed information on cesium transport is urgently required in connection with incorporation and decorporation processes in a biosphere contaminated with radiocesium."

Contamination of the biosphere is no small matter. The biosphere encompasses our entire environment on the Earth's surface—the land, air and water that support all living things.

Iodine is a nutrient that is utilised by the thyroid gland in the formation of certain hormones. These iodine-containing hormones are important in regulating body processes. If the amount of iodine in the diet is inadequate, the body will take in radioactive iodine-131 to fill its need and saturate the thyroid.

Radioactive iodine can be inhaled (in gaseous form) or ingested (in the form of iodine salts). In either case, once the iodine-131 migrates to the thyroid gland, it will irradiate nearby cells and, depending on the amount present, will impair thyroid functions and/or cause cancer later on.

In her 1979 book *Nuclear Madness*, Helen Caldicott, MD, stated that the time between the thyroid's uptake of iodine-131 and the development of cancer may be "twelve to fifty years". Other serious problems arise when iodine-131 accumulates in the thyroid of the developing foetus. This leads to a reduced rate of growth, low birth weight and increased infant mortality.

A report published in August 1977 by the National Council on Radiation Protection and Measurements (NCRP Report No. 55, "Protection of the Thyroid Gland in the Event of Release of Radioiodine") suggested that potassium iodide be considered for "thyroid-blocking" in an emergency. The principle of selective uptake explains this proposal. The non-radioactive iodine (contained in the potassium iodide compound) would be taken up by the thyroid gland to such an extent that the thyroid would be saturated—unable to absorb any more iodine. Thus, the body's uptake of radioactive iodine would be blocked. See chapter 7 of my book for more on iodine.

The 1977 NCRP report also proposed stockpiling iodine compounds for use in the event of a radiation emergency. Shortly after the nuclear accidents at Three Mile Island in 1979 and Chernobyl in 1986, efforts were made to distribute iodine preparations such as potassium iodide in areas where the population was exposed to radiation. The reason was to try to limit the absorption of iodine-131. Of course, this is just a partial solution to the health hazards created by nuclear fallout, because it only protects people from that one element.

Yet I have not heard of any large-scale plans to distribute blocking agents for other radioactive elements. If this principle is acknowledged to work for one set of radioactive and stable elements, I wonder why it has not been applied to other groups of elements.

Plutonium, which has a half-life of thousands of years, is a radioactive element, similar in structure to iron, that can be picked up in the human bloodstream and carried to iron storage cells in the liver and bone marrow, where it stays, as the other radionuclides do, to irradiate the surrounding cells.

In addition, according to Dr Caldicott: "Plutonium's iron-like properties also permit the element to cross the highly selective placental barrier and reach the developing fetus, possibly causing damage and subsequent gross deformities in the newborn infant."<sup>1</sup>

Radioactive zinc-65, instead of the stable forms of this mineral, can be incorporated in the body; it is deposited in the bones and reproductive organs.

Cobalt-60 can be used instead of stable forms of cobalt by microorganisms manufacturing vitamin B12. Vitamin B12 is a complex compound that functions in the synthesis of red blood cells and DNA. In addition, it is important in maintaining the health of the nervous system. The body stores vitamin B<sub>12</sub> for long periods of time.

The stable elements that block the uptake of radioactive ones are listed below [page 98 of the book].

SELECTIVE UPTAKE	
Stable Element	Radioactive Element
Calcium	Strontium-90
Iodine	Iodine 131
Iron	Plutonium-238, -239
Potassium	Caesium-137
Sulphur	Sulphur-35
Vitamin B <sub>12</sub>	Cobalt-60
Zinc	Zinc 65

The stable elements listed in the left-hand column block the uptake of the radioactive elements listed in the right-hand column. (The stable isotopes of iodine, sulphur and zinc are iodine-127, sulphur-32 and zinc-64.) Vitamin B12 is a compound containing the element cobalt. (Stable cobalt is cobalt-59.)

### **How Essential Minerals Protect the Body**

It seems clear that the body can reduce absorption of radioactive elements by building up reserves of the essential minerals in which it is low. Many investigators have studied the blocking effects of adequate iodine and calcium intake. In various ways, these essential minerals can reduce the body's utilisation of radioactive substances. Health researcher Dr Richard Passwater noted: "Normal dietary iodine can protect against the absorption of the radioactive iodine. Inhaled radioactive gas or ingested radioactive iodine salts will be rapidly excreted if the thyroid is in no need of iodine."

In an article in their collection of papers titled *Chemical & Radionuclide Food Contamination*, published in 1973, M. E. Alpert *et al.* wrote: "There have been several studies on prophylactic [preventive] and therapeutic measures to reduce the dose subsequent to human intake of radioiodine. The effect of these measures is based on reducing the uptake to the thyroid and/or the effective half-life... If a blocking dose, about 100 mg of stable iodine, is given within about 2 hours or less of initial iodine-131 intake, the percent uptake to the thyroid is reduced by about 90%."

But, wouldn't you say, given what we know, that it is a good idea *always* to have the thyroid's iodine needs met?

In Japan where traditionally the diet included ocean fish and seaweeds with protective amounts of iodine, they enjoyed the lowest rates of infant mortality in the world. However, after the Fukushima accident, foods from this area should largely be avoided.

Also, fish and seaweeds from *any* location should be considered very carefully and cautiously.

Other chapters in my book give more information on the protective food plan which shields from radiation.

A study published in the 1967 book *Strontium Metabolism*, edited by J. Lenihan, found: "Addition of Ca [calcium] to the diet of experimental human subjects reduced the retention and accumulation of Sr-90 [strontium-90] in bone."

In their article in *Chemical & Radionuclide Food Contamination*, mentioned above, M. E. Alpert *et al.* observed: "Newly formed bone has about the same strontium-calcium ratio as is in the blood circulating at the time of formation. There is some discrimination against strontium which may be influenced by preferential absorption of calcium through the gut [digestive tract]." The researchers found that if dietary calcium was available, the body was four times more likely to utilise it in the formation of bone than it was to use strontium.

As reported in a 1967 issue of the *International Journal of Applied Radiation and Isotopes*, doctors at the Veterans Administration Hospital in Hines, Illinois, investigated the effects of calcium and magnesium on the body's intake of radioactive strontium. They found that when calcium and magnesium figured in the diet, a significant amount of radiostrontium was removed from the bloodstream and excreted.

I haven't found in the medical literature many experiments with humans on the specific blocking power of adequate mineral nutrition. Medical practice doesn't usually allow any toxic substance to be given to humans for research, so demonstrations of the radioprotective benefits of adequate mineral nutrition in humans are limited.

However, we can conclude from research done with iodine-131 and strontium-90 that other radioactive elements such as caesium-137, zinc-65 and plutonium are blocked from being taken up by the body by their essential counterparts of potassium, iron and zinc.

### **The Healthy Survivor Theory**

Some groups in any given population are more susceptible to radiation. These groups include: infants *in utero*, babies and young children, because their cells are dividing rapidly; older people, because they generally have weakened immune systems due to having already been exposed to a cumulative amount of background and man-made radiation; and everyone who is in a weaker state of health.

The *healthy survivor theory*, which was formulated by the British epidemiologist Dr Alice Stewart, is based on scientific observations that those who managed to survive the early infections and diseases that set in following radiation exposure were less likely to die of cancer later on. They may very well have been healthier to begin with. Put simply, it seems clear that people who enjoy optimal levels of health are the most resistant to radiation damage.

The concept of the direct relationship between radiation doses and health effects has been revised as radiation

research has progressed. Once it was recognised that lower doses could do more damage, a major misconception was clarified; namely, that the biological system receiving the dose is the only factor determining the extent of the damage. But for our needs now, it is a crucial factor. We can influence the amount of radioactive elements that reach the cells of the immune system.

### **A Landmark Study**

Dr Alice Stewart's landmark study, "Delayed Effects of A-Bomb Radiation: A Review of Recent Mortality Rates and Risk Estimates for Five-Year Survivors", was published in the *Journal of Epidemiology and Community Health* in June 1982. Stewart's study provides evidence that those who are the healthiest are most likely to survive radiation exposure.

Stewart observed the healthy survivor effect at Hiroshima: that is, the individuals who did not succumb immediately to radiation from bomb fallout were healthier than their neighbours who did die shortly after the atomic blast. She made this determination by comparing their health statistics in the years after the bombing to those of the Japanese population in general.

She studied the death rate of the survivors in the years since 1945, and for certain diseases that are not considered to be affected by radiation she found the death rate was much lower than among the general population. She suggested that many studies that had been done on these survivors are misleading, and that all analysis of fallout effects on those near where the bomb fell should be adjusted for the fact of the healthy survivor. "The feeble go first," she said bluntly. Stewart felt that we must review previous conclusions. As she saw it, "the nub of the problem" is: "Can the straightforward analysis of dose-related death rates—which are the basis of current beliefs about the health risks of radiation workers—be regarded as robust under the conditions that existed...? The present [1982] review has found even the firmest of earlier conclusions unacceptable."

And so Stewart has presented us with the simple, crucial variable of "selective survival of exceptionally fit individuals during the period of acute mortality after the A-bomb radiation".

In a 1977 report to the Nuclear Regulatory Commission, Dr John Gofman cited "the possible existence of especially susceptible individuals" as "among the major factors that ultimately determine the amount of cancer arising from exposures of human populations to radiation".

In 1982, Dr Jacob Fabrikant, another eminent radiation researcher, pointed out: "Calculations of radiation induced cancer must take into account additional confounding factors, including sensitive genetic subgroups and exposure to other potentially carcinogenic agents." He noted that "host factors, environmental factors and immunologic factors also influence risk of cancer induction by radiation".

Dr Irwin Bross wrote a letter to the *New York Times*, hoping to publicise the shocking awareness that a few researchers had arrived at. His own cancer research had enabled him to identify children who were up to 25 times more susceptible to leukaemia (compared to the general population) as a result of X-ray exposure. He stated: "Procedures for calculating 'safe levels' based on average exposure' of average individuals' are not going to protect the children or adults who need the protection most." (I. D. Bross *et al.*, *New England Journal of Medicine* 1972 Jul; 287:107-110)

Whether you state the fact positively or negatively, it still amounts to the same thing: those who are healthy are the most fortified against radiation; those who are less healthy are more susceptible. But what does nutrition have to do with this?

### **Optimal Health and Protection Against Radiation**

Good nutrition is directly related to good health. On the most basic level, our diets provide us with the energy (calories) and nutrients we need to carry on vital cellular processes. In the prolonged absence of adequate food intake, vitamin deficiency diseases, malnutrition and starvation result. But diet can also enhance or impair our health in more subtle ways. For example, the quality of the food we eat can have a bearing on the efficiency of the body's immunological defence systems. In particular, nutrition can alter our susceptibility to various types of cancer and help us combat the proliferation of harmful free radicals.

Charles Simone, MD, author of the 1983 book *Cancer and Nutrition*, stated: "Poor populations around the world who are malnourished are more susceptible to infection than those who receive adequate nutrition. Investigators studying the relationship between the immune system and nutrition have found that nutrition affects immunity and also affects the development of cancer either directly or indirectly via the immune system."

"Dietary Carcinogens and Anticarcinogens", an article published in *Science* on 9 September 1983, discusses factors in cancer incidence. Author Dr Bruce Ames concluded that "epidemiologic studies have indicated that dietary practices are the most promising area to explore". Reviewing recent studies, including the National Academy of Sciences report "Diet, Nutrition, and Cancer" (1982), he noted: "These studies suggest that a general increase in consumption of fiber-rich cereals, vegetables, and fruits and decrease in consumption of fat-rich products and

excessive alcohol would be prudent." Moreover, he pointed out: "We have many defense mechanisms to protect ourselves against mutagens and carcinogens, including continuous shedding of the surface layer of our skin, stomach, cornea, intestines and colon.<sup>1</sup>

Good health is actually a state of continuous detoxification; our bodies maintain a constant defence against mutagens (substances that can cause chromosomes to mutate) and carcinogens (cancer-inducing agents). The healthy immune system destroys toxic substances that do get into the body, and isolates and removes damaged cells before malignancies develop.

In their study entitled "Systemic Protection Against Radiation", published in *Radiation Research* in 1975 [62:357-363], R. Pageau *et al.* observed radiation effects on two groups of rats, one fed an average diet and the other a high-nutrient diet. The latter group was found to be more radiation-resistant: "The radioprotective action of the diet might be explained in terms of an enhanced cellular proliferation of the hematopoietic tissues [tissues responsible for manufacturing new blood cells]...and a more efficient immune response in diet-fed animals." "However," the authors pointed out, "it is important to note that the diet must be fed for a certain time to achieve a radioprotective action."

Among the many researchers who have considered the interrelationship between nutrition and environmental hazards is Dr Roger Williams, a pioneer in preventive medicine.

Williams based his book *Nutrition Against Disease* on the thesis that the nutritional micro-environment of our body cells is crucially important to our health. He wrote: "Those who are well nourished in every respect are likely to be protected against drugs and toxins that are foreign to their bodies."

Dr Carl Pfeiffer, an eminent scientist, also noted: "Researchers are discovering that dietary methods can help protect our bodies from environmental abuse."

The well-known health reporter Herbert Bailey found that "the natural defenses of living things against deleterious free radical reactions can be significantly influenced by diet".

While researchers and scholars in many disciplines have found that if a person is nutritionally well-fortified he is less likely to absorb or be affected by dangerous substances, this awareness needs to become more widespread.

### **Healthy Survivors and Human Survival**

George Ohsawa, a student of philosophy who contracted tuberculosis at the age of 16 and was declared incurable by medical doctors, took it upon himself to discover what was wrong with him. He eventually found his way to health and then devoted his life to sharing his philosophy through writing and lecturing. In one of his books, *Cancer and the Philosophy of the Far East*, he wrote: "An organism with a stable constitution will be able to absorb and neutralize any unbalanced product—up to a point. In fact, we can even extend this theory to its ultimate by saying that healthy organisms can absorb and neutralize any poison. The historic case of the monk Rasputin is an example of this capacity pushed to the extreme."

Dr Tatsuichiro Akizuki, author of *Nagasaki 1945*, the first full-length eyewitness account of the A-bomb attack on 9 August 1945, confirmed the healthy survivor theory in his observations of those who came to him for help afterwards: "All the people who fell victim to the bomb and who happened to be within 500 meters of the epicenter died before August 15. After that, nearly all those people who had been within 500 and 1,500 meters of the explosion slowly died, one after the other, between then and the end of September.

The difference in their time of dying depended on the quantity of radioactive rays they absorbed, on their physical condition and their exact location at the moment of the explosion." He pointed out: "Their survival time depended on their constitution and age which all made a difference to the way in which radiation sickness attacked them and to the length of time they survived." This doctor and his staff survived and continued to care for others on a simple diet of rice and miso (a traditional food made from fermented soybeans and sea salt, often with the addition of grains such as barley or rice).

The "Radioecological Assessment of the Wyhl Nuclear Power Plant" (commonly referred to as the "Heidelberg Report"), was published in Germany in 1979. The report, which studied all aspects of nuclear plant emissions, stated that the risk factor for radiation depends on many things, but, as far as the individual goes, the age, sex, state of health and genetic constitution are determinants. These researchers wrote: "Since not all individuals are healthy, some individuals may be exposed to significantly higher radiation doses than those calculated here for a normal, healthy person; this will depend on a person's genetic constitution and state of health."

Michio Kushi, a leading nutrition teacher and philosopher, feels that the future survival of the human race is threatened not so much by radiation and environmental hazards as it is by poor health induced by poor eating habits. In his 1983 book he wrote: "Radiation and pollution can accelerate the accumulation and spread of cancer, but only if the body is already in a weakened state. The reason that some people would be more susceptible to the effects of radiation, for instance, is that the overall condition of their blood and tissues is not healthy as a result of

their longtime dietary habits." He was realistic yet hopeful about human survival: "People still eating the modern refined diet have a much lower tolerance for radioactivity and are at risk of developing leukemia and other cancers. Reversing the biological degeneration of modern society is the key to curing atomic sickness and other forms of cancer."

### **Low-level Radiation Hazards**

The following is a discussion of some of the health-damaging and global effects of low-level radiation. Low-level radioactivity includes radiation released from the routine operation of the world's 433 (as of 2012) nuclear power plants, plus leaks and accidents, nuclear fuel recycling, uranium mining and other related activities.

### **Infertility**

The global fertility rate has dropped by half since 1960. The cumulative effects of radiation-caused infertility raise the possibility of gradual human extinction. Escalating infertility in most western countries has forced couples to turn to assisted reproduction and pre-made embryos in ever-growing numbers.

According to the CIA's *World Factbook 2012*, the fertility rate of the United States has halved in the last 50 years.

Dr John Gofman, an eminent scientist, medical doctor and eloquent spokesman against the hazards of nuclear power, explained in 1970 that "the worry about over-population would become a non-worry due to radioactivity". (Tamplin, Arthur R. and John W. Gofman. *'Population Control' through Nuclear Pollution*, Nelson-Hall, Chicago, 1970) This prediction is confirmed in the decline in fertility among those born during the period of atmospheric bomb testing between 1955 and 1963.

### **Weakened Immune System**

Radiation weakens the immune system. On the correlation between low-dose radiation and weakened immunity, radiation physicist Dr Ernest Sternglass stated: "It appears that perhaps the most serious unanticipated effects of fallout is long-term, persistent immune deficiency. It can weaken the immune defenses of the body at very low total doses leading to unexpectedly large increases in infectious diseases and cancers." (*International Journal of Biosocial Research* 1986 Jul; 8[1]:7-36; p. 18)

Initially, zealous industry misrepresentation of the facts led the public to believe that small amounts of radiation were of no special concern. Yet these low levels are exactly the cause of weak immunity and resulting diseases.

Authorities couldn't ignore emerging data, and in December 1989 the government-sponsored National Academy of Sciences, in a report titled "Biological Effects of Radiation", stated that there is no safe level of radiation.

Low, protracted doses of radiation cause physiological damage through the formation of free radicals that destroy cell membranes hundreds to thousands of times more efficiently than might be expected in calculations related to high-dose damage.

So, the everyday amount of radiation that is released as part of the normal operation of the world's 400+ nuclear power plants is a very grave concern. Nuclear power plants release steam and water as part of their normal operations, and these releases, even though they may be partially filtered, disperse radiation into our air and drinking water, onto farmland and into our food chain.

The everyday releases of low-level radioactivity by nuclear power plants have been found to cause several kinds of health damage including premature births, congenital defects, infant mortality, mental retardation, heart ailments, arthritis, diabetes, allergies, asthma, cancer, genetic damage and chronic fatigue syndrome. This low level is linked to previously unknown infectious diseases and the resurgence of old ones by damaging the developing white blood cells originating in the bone marrow and thus weakening the immune system.

### **Mutated Bacteria and Viruses**

It is well known that radiation can cause mutations in bacteria and viruses. Dr Andrei Sakharov, the famous Russian physicist, described in his 1992 *Memoirs* that, even at low levels, radiation could increase mutations of bacteria and viruses. His predictions, which he made in 1958, have come true, and we are seeing new ailments such as Reyes syndrome, which first appeared in 1963, and Legionnaires' disease, which is caused by bacteria that were not threatening prior to 1976. AIDS may even be related to a mutated virus combined with a weakened immunity in a generation born after the first nuclear weapons were detonated.

Of particular interest is Lyme disease, which first appeared in 1975 near the Millstone and Haddam Neck nuclear power plants in Connecticut. Dr Jay Gould pointed out: "In 1975 there were 59 cases of Lyme disease recorded; in 1985 the number increased to 863, mainly in the two counties of Middlesex and New London, CT, near the Millstone Nuclear Power Plant. Just as increases in cancer may be linked to the huge radiation release from Millstone in 1975, so too may be the tick-borne Lyme disease epidemic.



The Lyme disease is carried by a spirochete that had not been as harmful to humans prior to 1975. It is well known that radiation can cause mutations in bacteria. The enormous 1975 Millstone radiation release may have caused just such a mutation in the tick-borne spirochete." (Gould, J. and B. Goldman, *Deadly Deceit: Low Level Radiation, High Level Cover-Up*, Four Walls Eight Windows, New York, 1990)

So we have a double challenge: the weaker immune system and the new diseases resulting from mutated pathogens.

Dr Ernest Sternglass further explained: "When the radiation from such isotopes as strontium-89 and -90 in the bone marrow mutates an existing virus that invades the T-cells of the immune system and kills them in the process of replication, the stage is set for the complete collapse of the immune defenses and resulting death from opportunistic infections or cancer." (Sternglass, Ernest, "The Implications of Chernobyl for Human Health", *International Journal of Biosocial Research* 1986 Jul; 8(1):7-36; p. 19)

### **Loss of Oxygen Globally**

Walter Russell, a visionary artist and scientist, predicted in his book *Atomic Suicide?*, published in 1957, that due to man-made radioactivity we would suffer a reduction of oxygen in the atmosphere. Like Andrei Sakharov's predictions in the 1950s, Walter Russell's foresight is now coming true. Our current oxygen levels are down to about 19 per cent (*BioTech News*, 1997). The standard reference amount is 21 per cent oxygen. Some experts say that we may have originally evolved in an atmosphere of 38 per cent oxygen. Now, due to the loss of the two main producers of oxygen—forests and ocean plankton—measurements as low as 12 per cent and 15 per cent have been made in heavily industrialised areas. This oxygen-depleted condition is a contributing cause of the generalised lack of well-being that many are experiencing.

Trees and other land plants provide about half our oxygen, and plankton provides the rest. Phytoplankton, the base of the marine food chain, is declining. Various studies confirm this: plankton in parts of the Antarctic Ocean had already declined by up to 12 per cent when S. Weiler testified to the Senate Commerce Committee in November 1991. Trees absorb radioactive carbon-14 in place of stable forms of carbon, and in this way they are gradually killed.

In *The Petkau Effect* [first published in German in 1985], Ralph Graeb described how radioactivity has harmed trees and forests: "It is assumed that the decisive physiological damage resulting in current forest death must have begun during the 1950s. This is depicted in a reduction in density and width of tree rings, and in reduced growth, which is true in the Northern Hemisphere and in the Himalayas.

"Neither aging, location, nor climate can be considered as the possible sole cause of damage. The growth ring of a tree shows exactly what effects the tree has experienced, both in terms of time and seriousness. During the 1950s and 1960s, there must have been a global wave of air pollution which caused the initial damage."

The author speculated that it may not be just the usual chemicals which are so damaging to trees. He noted that these trees are mainly within the 30th to 60th parallels of northern latitude: "This zone contains the most nuclear power plants—over 300—and almost all nuclear reprocessing centers. Also, the vast majority of nuclear weapons tests occurred in this area." [Graeb, Ralph, *The Petkau Effect*, Four Walls Eight Windows, New York, 1992]

### **Ozone Breakdown**

The protective layer of ozone around the Earth filters out solar and cosmic rays and prevents them from reaching our planet. Ozone surrounds the Earth in a layer between six and 30 miles [9.7 and 48.3 kilometres] above sea level.

It is formed when light rays strike molecules of oxygen, which is O<sub>2</sub>, and causes them to break into two separate oxygen atoms, or an O and an O.

An atom of oxygen then combines with a molecule of oxygen and forms ozone, which is O<sub>3</sub>. It breaks down again and then recombines again. And so on; unless it is interfered with. Radiation interrupts the process of ozone formation.

The principal message of Walter Russell's book *Atomic Suicide?* was that the development of nuclear weaponry and the nuclear industry, if it continued, would eventually destroy the planet's oxygen: "The element of surprise which could delay the discovery of the great danger, and thus allow more plutonium piles to come into existence, is the fact that scientists are looking near the ground for fallout dangers. The greatest radioactive dangers are accumulating from eight to twelve miles [12.9 to 19.3 kilometres] up in the stratosphere. The upper atmosphere is already charged with death-dealing radioactivity, for which it has not yet sent us the bill. It is slowly coming and we will have to pay for it in another century, even if atomic energy plants ceased today."

(Russell, Walter and Lao, *Atomic Suicide?*, University of Science and Philosophy, Virginia, 1957, p. 18)

**About the Author:**

Sara Shannon is a nutritionist, an environmentalist and a long-time concerned citizen. She received her degree in nutrition from the State University of New York. After comprehending that good health cannot be maintained within the context of the increasingly toxic Earth, she began to research radiation health damage.

The 1979 Three Mile Island accident in Pennsylvania, USA, further prompted her concerns and resulted in her 1987 book titled *Diet for the Atomic Age* (Avery Books), now revised in the 2014 edition titled *Radiation Protective Foods* (Author House), which is also in an audio version, available on Amazon. Visit the book's website at [www.radiationprotectivefoods.com](http://www.radiationprotectivefoods.com).

Sara Shannon is also the author of *Good Health in a Toxic World* (Warner Books, 1994) and many journal articles in the period 1988-2000.

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**Editor's Note:**

This article is extracted and edited with permission from Sara Shannon from the 2014 revised edition of her book *Radiation Protective Foods: How To Shield Yourself From Low-Level Radiation* (the 2014 preface, chapters 1 and 3, and the 2012 appendix). Because of space limitations, we are unable to include the accompanying references from the book. To obtain a copy, go to [www.amazon.com](http://www.amazon.com) or to [www.radiationprotectivefoods.com](http://www.radiationprotectivefoods.com).

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## The Great Pyramid Of Giza And The Queen's Chamber Shafts: A Chemical Perspective

by Brett I. Cohen, PhD © 2015

### Abstract

In his book *The Giza Power Plant: Technologies of Ancient Egypt*<sup>1</sup>, Christopher Dunn proposes a very intriguing theory regarding the function of the Queen's Chamber. He suggests that it was an engine of a great power plant, where hydrogen (H<sub>2</sub>) gas was used to create piezoelectric or electromagnetic energy.

A detailed chemical approach has been applied to the chemicals used in the southern and northern shafts of the Queen's Chamber. In the southern shaft of the Queen's Chamber, sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) was used, not hydrochloric acid (HCl) as Dunn describes. In the northern shaft of the Queen's Chamber, a salt mixture of ammonium chloride (NH<sub>4</sub>Cl) and zinc chloride (ZnCl<sub>2</sub>) was used.

Hydrogen gas could be generated from both the southern and northern shafts using the chemicals described. A mixing of the southern and northern shaft chemicals was *not* necessary for the production of H<sub>2</sub> gas. Each system described in this paper could be a stand-alone source of H<sub>2</sub> gas.

### Introduction

The Great Pyramid of Giza is the oldest and the largest pyramid of the three pyramids on the Giza Plateau (or Necropolis) in Giza, Egypt. Markings inside chambers in the Great Pyramid reference the construction of the pyramid in the Fourth Dynasty of Egyptian Pharaoh Khufu. The Great Pyramid is the oldest of the Seven Wonders of the Ancient World, the only one that remains largely intact. It is also known as the Pyramid of Khufu or the Pyramid of Cheops. It is believed by Egyptologists that the pyramid was built over a 10-20-year period and that construction was concluded in about 2560 BC.<sup>2</sup>

In *The Giza Power Plant*, Dunn proposes that the Queen's Chamber in the Great Pyramid of Giza was an engine of a great power plant. Here is a brief description of Dunn's theory.

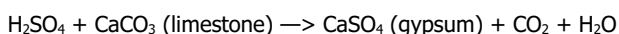
- 1) Each of the shafts (southern and northern) found in the Queen's Chamber held separate chemicals, the southern shaft containing dilute hydrochloric acid and the northern having hydrated zinc chloride.
- 2) When these chemicals were mixed together, hydrogen gas was produced.
- 3) H<sub>2</sub> gas filled the Grand Gallery and travelled up into the King's Chamber, where acoustic energy was converted to piezoelectric energy.

In this paper, each of the shafts (southern and northern) of the Queen's Chamber and their chemicals as Dunn describes are analysed for chemical validity, and chemical alternatives are also introduced and discussed. Only the chemistry regarding the Queen's Chamber shafts (southern and northern) and its production of hydrogen gas is discussed.

### Use of Sulphuric Acid (not Hydrochloric Acid) in the Southern Shaft of the Queen's Chamber

It is proposed that sulphuric acid (molecular weight [MW] of 98.08 g/mol) was used in the southern shaft of the Queen's Chamber. H<sub>2</sub>SO<sub>4</sub> is a highly corrosive, strong mineral acid and its historical name is "oil of vitriol", the archaic name for "sulphate".<sup>3</sup> Dunn describes the use of dilute hydrochloric acid (HCl) in the southern shaft. He also explains that gypsum residue was found in this shaft. Gypsum is a soft sulphate mineral (calcium sulphate dihydrate, CaSO<sub>4</sub>·2H<sub>2</sub>O). Dunn states that the limestone (a sedimentary rock composed largely of the mineral calcite, CaCO<sub>3</sub>) surrounding the shaft would undergo a chemical reaction with HCl to produce gypsum.

However, HCl cannot produce a gypsum adduct since no sulphate (SO<sub>4</sub>) is found in its formula, therefore H<sub>2</sub>SO<sub>4</sub> is the likely acid used. The chemical substitution reaction below illustrates the production of gypsum adduct from H<sub>2</sub>SO<sub>4</sub>:



The source of H<sub>2</sub> found in the southern shaft could be explained by the dissociation of aqueous H<sub>2</sub>SO<sub>4</sub>.

The use of vitriols dates back to antiquity and is recorded in the Sumerians' word lists (dictionaries) written c. 600 BC.<sup>4</sup> In these word lists, all types of vitriol are described according to colour. The green vitriol is iron(II) sulphate with seven hydrated water molecules (FeSO<sub>4</sub>•7H<sub>2</sub>O).<sup>5</sup> In ancient times, green vitriol was called "copperas".

A survey of the chemical literature has not found any reference that the ancient Egyptians used H<sub>2</sub>SO<sub>4</sub>, but here it is shown that they had the technology and resources to produce large quantities of this acid.

Sulphuric acid is a strong, highly corrosive acid. The production and storage of H<sub>2</sub>SO<sub>4</sub> would have been problematic for the ancient Egyptians.

The most abundant artefact found in Egyptian archaeological sites is ceramic clay pottery. The ancient Egyptians fired marl clay ceramic pottery at very high temperatures (between 800°C and 1000°C), and these ceramic materials were very hard after firing.<sup>6</sup>

The marl clay ceramic pottery usually did not contain any organic materials after firing. Such a ceramic vessel would have been ideal for the production and storage of H<sub>2</sub>SO<sub>4</sub> due to its high chemical resistance and strength.

The mineral known as green vitriol would have been used for the production of H<sub>2</sub>SO<sub>4</sub>.<sup>7</sup>

The chemical procedure would be to place the solid green vitriol mineral in a marl clay ceramic vessel and heat it to approximately 1000°C for a few hours. The resulting liquid produced, H<sub>2</sub>SO<sub>4</sub>, would be decanted off and placed in another marl clay ceramic vessel for storage. The resultant solid residue of green vitriol would then be discarded and the process would be repeated numerous times using new green vitriol mineral.

This chemical procedure is called a "dry distillation", and such a procedure is found in the chemical literature.

In 1957, a German chemist, Gerald Schroder, reported a "dry distillation" procedure using green vitriol. Schroder's procedure is as follows. A quantity of 200 grams (0.72 mol) (approximately half a pound) of green vitriol (FeSO<sub>4</sub>•7H<sub>2</sub>O, MW of 277.85 g/mol) was gradually elevated in temperature to 1000°C over a three-hour period, after which time approximately 8.0 grams of a "strongly acidic liquid, smelling like SO<sub>2</sub>" was obtained.

Upon chemical analysis, this resultant liquid had approximately 11% H<sub>2</sub>SO<sub>4</sub>.<sup>8</sup> (If the reaction had gone to completion, a total of 70.60 grams of H<sub>2</sub>SO<sub>4</sub> would have been produced. Here, the percentage yield is 8.0 grams / 70.60 grams x 100% = 11.33%.)

So, in a very simple procedure, 200 grams of starting material (green vitriol) was heated, and this resulted in the production of approximately 8.0 grams (0.082 mol) of H<sub>2</sub>SO<sub>4</sub>.

The ancient Egyptians would have repeated this process over and over again to produce large quantities of H<sub>2</sub>SO<sub>4</sub>. They had the means of achieving the required temperatures from the technology of producing marl clay ceramics, and these ceramic vessels would have been ideal for the production and storage of H<sub>2</sub>SO<sub>4</sub>.

All different shapes and sizes of marl clay ceramic pottery have been found in archaeological sites. Ceramics with large-diameter lower-vase shapes with small-diameter mouth and neck openings have also been found.<sup>9</sup>

This shape would have been ideal for the production of H<sub>2</sub>SO<sub>4</sub> because it would have reduced exposure to the fumes of sulphur dioxide (SO<sub>2</sub>) gas and hydrogen (H<sub>2</sub>) gas in the heating process. Sulphur dioxide gas is a toxic gas with a pungent, irritating and rotten smell.

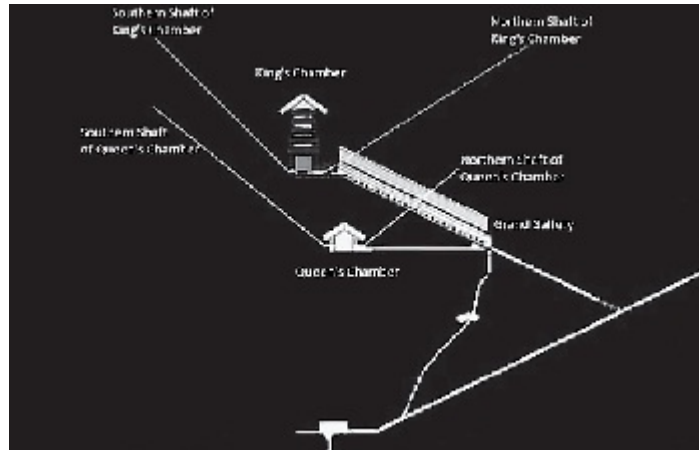
Green vitriol allows the "dry distillation" process to occur by virtue of the seven hydrated water molecules found in the mineral compound. When the mineral is heated as described, the solution obtained is a water-based solution of H<sub>2</sub>SO<sub>4</sub>.

It should be noted that modern chemical processes (chemical reactions in aqueous solution, *not* "dry" as the one proposed for the ancient Egyptians) for the production of H<sub>2</sub>SO<sub>4</sub> are much more efficient than the procedure described above.

The ancient Egyptians would have put more manpower into the "dry distillation" process and, over time, they would have produced significant quantities of H<sub>2</sub>SO<sub>4</sub>.

### **Use of an Ammonium Chloride-Zinc Chloride Solution in the Northern Shaft of the Queen's Chamber**

Dunn also describes the use of a hydrated zinc chloride (ZnCl<sub>2</sub>) solution in the northern shaft of the Queen's Chamber. ZnCl<sub>2</sub> is a very soluble solid in water, and in the solid form it is extremely hygroscopic (it absorbs water very quickly from the surrounding air).



Inside view of the Great Pyramid of Giza: King's Chamber, Grand Gallery and Queen's Chamber (southern and northern shafts).

At the very end of the northern shaft a limestone door with two metal handles was found, one handle appearing to have a white coating on it and surrounding it.

Dunn believes that this coating was formed by some type of electroplating process.

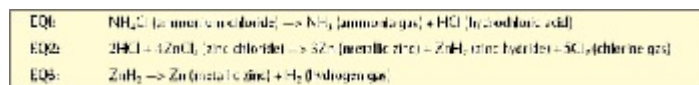
If this is true, it is proposed here that a solution of ammonium chloride ( $\text{NH}_4\text{Cl}$ ) would also have been needed for the electroplating process to occur without extreme heat.  $\text{NH}_4\text{Cl}$  is a white, crystalline, inorganic salt compound that is extremely soluble in water. Aqueous solutions of  $\text{NH}_4\text{Cl}$  are mildly acidic (see EQ1).

A form of electroplating (also called "galvanisation" or "hot-dip galvanisation") exists where a metal (iron, steel or copper) is placed in a bath of molten zinc (Zn) at a high temperature (approximately  $500^\circ\text{C}$ ).<sup>10</sup>

This process would have been problematic for the ancient Egyptians, so, in order to achieve the electroplating effect that Dunn describes, they needed to use another chemical,  $\text{NH}_4\text{Cl}$ .

A type of electroplating called "electro galvanisation" exists where a thin layer of zinc is deposited and bonded to metal (where a controlled thickness of Zn may be applied and deposited) by running a current of electricity through a salt (saline)-zinc solution, and this process can be performed at lower temperatures, such as at room temperature.<sup>11</sup>

It is proposed here, where multiple simultaneous reactions are occurring at room temperature, that with the use of an electric current from the production of piezoelectric energy from the complete Giza power plant process (see Introduction), a solution of  $\text{NH}_4\text{Cl}$  (salt) and  $\text{ZnCl}_2$  could achieve the electroplating effect. The reactions are noted in the equations below.



In EQ1, aqueous  $\text{NH}_4\text{Cl}$  results in the dissociation into  $\text{NH}_3$  gas and  $\text{HCl}$ .

In EQ2, aqueous  $\text{ZnCl}_2$  and  $\text{HCl}$  results in the production of metallic Zn for the electroplating process, an unstable zinc hydride ( $\text{ZnH}_2$ ) and chlorine ( $\text{Cl}_2$ ) gas.

In EQ3,  $\text{ZnH}_2$  results in the production of metallic Zn for the electroplating process and  $\text{H}_2$  gas. Aqueous  $\text{ZnH}_2$  has been observed to decompose rapidly in acidic solutions ( $\text{HCl}$  found in EQ1 and EQ2)<sup>12</sup> to metallic Zn (used for the electroplating process) and  $\text{H}_2$  at room temperature.

Some of the gases produced in EQ1, EQ2 and EQ3 ( $\text{NH}_3$ ,  $\text{Cl}_2$  and  $\text{H}_2$ ) could be dissolved in the aqueous salt (saline) solution of  $\text{NH}_4\text{Cl}$  and  $\text{ZnCl}_2$ . The formation of  $\text{H}_2$  gas in EQ3 is a source of  $\text{H}_2$  gas found in the northern shaft.

"Sal ammoniac" is the name of the natural mineralogical form of  $\text{NH}_4\text{Cl}$ , and the mineral is commonly found on burning coal dumps (due to the condensation of coal-derived gas). Interestingly, the word "ammonia" ( $\text{NH}_3$ ) is

related to the classical-era discovery of sal ammoniac near the temple of Zeus Ammon in the Siwa Oasis in the Libyan Desert.

The ancient Egyptians were very familiar with  $\text{NH}_4\text{Cl}$ . At one stage in their history, they worshipped Amun (or Amon, a major Egyptian deity) and used  $\text{NH}_4\text{Cl}$  in their religious worship rituals. Also, several words are derived from Amun via the Greek form, Ammon, such as "ammonia" and "ammonite".<sup>13</sup>

## Conclusion

In conclusion, it is proposed that in the southern shaft of the Queen's Chamber,  $\text{H}_2\text{SO}_4$  was the acid used, not HCl. In the northern shaft of the Queen's Chamber, a salt (saline) mixture of  $\text{NH}_4\text{Cl}$  and  $\text{ZnCl}_2$  was used.

It has been illustrated that  $\text{H}_2$  gas could be generated from both the southern ( $\text{H}_2\text{SO}_4$ ) and northern ( $\text{NH}_4\text{Cl}$ - $\text{ZnCl}_2$ ) shafts using the chemicals described in this paper.

It would not be feasible for the mixing of the chemicals of the southern and northern shafts to be efficient, since Dunn describes no mixing apparatus as existing in the Queen's Chamber.

Therefore, it is also proposed that a mixing of chemicals of the southern and northern shafts was not necessary for the production of  $\text{H}_2$  gas.

Each system described in this paper could be a stand-alone source of  $\text{H}_2$  gas.

## About the Author:

Dr Brett I. Cohen holds a PhD in inorganic and bioinorganic chemistry from the State University of New York at Albany. He received his PhD in November 1987 for his thesis entitled "Chemical Model Systems for Dioxygen-Activating Copper Proteins" and was a postdoctoral fellow at Rutgers University in 1988-1989.

His research at Rutgers was in the area of peptide synthesis utilising transition metal chemistry.

After his postdoctoral fellowship, from 1989 to 2003 Dr Cohen was one of the owners of Essential Dental Systems (manufacturer of dental composites and dental materials) where he was Chief Executive Officer and Vice President of Dental Research.

Dr Cohen has had over 100 papers published in peer-reviewed journals (such as *Journal of the American Chemical Society*, *Inorganic Chemistry*, *Journal of Dental Research*, *Journal of Prosthetic Dentistry*, *Journal of Endodontics* and *Autism*, etc.) and has obtained 16 US patents.

These papers cover a variety of areas such as inorganic and bioinorganic chemistry, biomedicine, autism, physical chemistry, dentistry and more. Dr Cohen can be reached via email at [ebichis@aol.com](mailto:ebichis@aol.com).

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## Is There a Fourth Phase of Water?

As well as having solid, liquid and gas phases, water may have a fourth state, an exclusion zone, that is more viscous, stable and ordered than bulk water. Inspired by Russian studies of polywater and the well-known crystalline lattice of ice, researchers have developed their stacked-sheet model.

by Gerald H. Pollack, PhD

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<http://www.waterjournal.org/>

Extracted and edited from chapter 4 of Dr Pollack's book *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor*

As a college freshman back in the dark ages of 1957, I recall the stir created by the launch of the world's first space satellite. *Sputnik* was a stunning achievement. It was also a Soviet coup that caught the US off guard—which felt ominous during that tense Cold War era. Galvanised by that Soviet feat, the US government responded by massively funding scientific research and engineering development. *Sputnik* had been an embarrassment which the government could not allow to happen again.

But, only a decade later, a new embarrassment seemed imminent. This time, the source of the problem arose from something less lofty than a satellite: it came from water science. The Russians had struck again, having apparently discovered a new phase of water. Russian scientists had put some water into narrow capillary tubes and found that the water's properties changed dramatically. The water no longer behaved like a liquid; nor was it a solid. For a while, it looked like a genuinely new phase.

Elementary chemistry teaches us that water has three phases (or states): solid, liquid and gas.

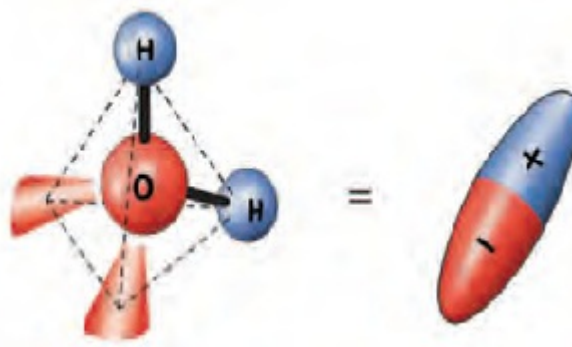


Figure 4.3: Textbook structure of the water molecule (left), showing cones of negativity and the region of positivity creating a tetrahedral shape. The separated charges are commonly represented as a simple dipole (right).

The Russian findings implied a fourth phase—or at least something distinctly different from the other three phases. According to experimental findings described previously [see chapter three], water next to common hydrophilic surfaces takes on different properties: exclusion zone (EZ) water is more viscous, more stable and more ordered than bulk water. While not exactly matching what the Russians claimed to find, these EZ features seem close enough to raise the suspicion that their findings and our findings might overlap.

We begin by reviewing what the Russians actually found and the international intrigue that surrounded those findings. Next, we see what useful truths can be extracted from the ensuing debacle. We then focus on the exclusion zone. Is the EZ a simple, organised stack of water molecules, or does it have some other crystal-like organisation? Does that structure really constitute a fourth phase of water?

### Revisiting the Polywater Debacle

The Russian story began when an obscure scientist named Nikolai Fedyakin discovered that, under certain conditions, water could become unexpectedly stable: it became difficult to freeze and equally difficult to vaporise. It also seemed denser and more viscous than bulk water. Excited by this unusual stability, Fedyakin took his results to the Soviet Union's most prominent physical chemist, Boris Derjaguin. Derjaguin was impressed enough to launch a cadre of lieutenants in hot pursuit.



Derjaguin appreciated that capillary tubes were not the only possible materials interfacing with water. Anything touching water creates an interface—from a glass that holds drinking water to the proteins lying inside the cell. All such interfaces create "interfacial" water with properties potentially just as stable as the water lying inside the capillary tubes. Plainly, Derjaguin understood the stakes: unravelling this single phenomenon might hold the key to understanding a good deal of nature.

Derjaguin explored the phenomenon meticulously. To assure purity, the water used in his experiments was first allowed to evaporate and subsequently condense inside scrupulously cleaned glass capillary tubes. It was this seemingly pure water that exhibited such remarkable stability. Yet the very issue of purity ultimately led to Derjaguin's downfall.

Although Derjaguin's work had become well known to the Russian community by the mid-1960s, only later did westerners begin to take notice. Follow-up studies soon began in the United States and Great Britain.

Soon, everyone became interested in this special kind of water. Even the press took notice. With its inevitable tendency towards sensationalism, the press aroused concern by fabricating a theory that throwing a thimbleful of this stuff into the ocean might act like a seed crystal, polymerising all the Earth's water supply into one massive blob and rendering it useless for consumption.

As a result of this kind of purple Cold War prose, it came as some relief when this polymer-like water, or "polywater", was shown to be an experimental goof. Repeating the experiments, western scientists found that the water contained traces of silica, presumably leached from the walls of the enveloping quartz capillary tube. Hence, the water was impure after all. Although water in a large beaker could hardly be presumed to contain meaningful concentrations of the container material, here the scientists were dealing with extremely narrow tubes with surface-to-volume ratios high enough that the silica concentration inside the water could increase beyond trivial levels; indeed, the concentration was above the detection threshold. Some silica apparently dissolved in the water; and once that contamination was revealed, the Soviets had egg (or silica?) on their faces.

Later, another western scientist took glee in reporting that polywater-like features could be observed when salt was added to pure water—implying that the Russian results might have arisen from summer sweat. Guffaws could be heard reverberating around the world.

Derjaguin himself sealed the coffin of polymeric water by finally conceding that his water had indeed been impure. With this public concession, the world's water supply could be deemed safe after all, rescued from the impending threat of polymeric solidification. Case closed. Debunking polywater had become America's response to the coup of *Sputnik*. This time, the joke was surely on the Russians.

Although the description of this famous incident has made its way into multiple books, the inside story of the episode has yet to be told. Here are a few relevant tidbits. While travelling in Russia, I had the pleasure of chatting with the director of a famous biophysical institute who had been good friends with Derjaguin. They had lived in neighbouring flats. The biophysicist told me that the two of them had enjoyed conversations almost daily and assured me that, right up to the time of his death, Derjaguin felt certain that trace contamination was not a decisive issue, despite his published retraction. I heard much the same thing later from another prominent Russian scientist who had been one of Derjaguin's last proteges. Publicly, Derjaguin professed error; privately, he felt certain that he had been on the right track.

Why would a scientist concede a sin he had not committed? The proud Soviet government must have suffered appreciable embarrassment when one of its leading scientists was accused of sloppy scientific technique. The sin seemed to belong to the Soviets. Kept on a short leash by a totalitarian regime, Derjaguin might have been pressured to retract. Retraction would have shifted the blame onto the individual and away from the regime. Blame Derjaguin—not the Soviets.

Political pressure was certainly in evidence on the other side as well. Fearful of Soviet dominance following the *Sputnik* coup, western scientists were definitely on the defensive. Implicating sweat in the water must have given those westerners a hefty ego boost. In his book *Polywater*<sup>4</sup>, Felix Franks recounts the events surrounding this famous incident.

My own intuition is that both sides were right. Over the years that I have studied water, it has become apparent that obtaining absolutely pure water is next to impossible. No matter the precautions taken, some contamination is unavoidable because water is a universal solvent; it can dissolve practically anything. Hence, Derjaguin's water probably did contain traces of silica and perhaps also traces of salt. The critics might have been on target.

On the other hand, that's where the story becomes interesting. What was questioned in Derjaguin's experiments was only the water—not the correctness of the observations made *using* that water. Let us suppose that Derjaguin's water had been impure, as charged. Then the question reduces to this: in the presence of contaminants, why does water take on the interesting features that it does?

Derjaguin, Fedyakin and even many western scientists detailed those features in many published papers. Why not

consider those features? While I do not advocate careless experimentation, trace contaminants are inevitable and need not automatically disqualify any further exploration.

Why throw out the baby with the bathwater?

Keeping these considerations in mind, let us move on to explore the nature of EZ water. EZ water lies near surfaces, just like polywater.

Could this similarity be more than coincidental?

### **Possible Structures of Water Near Surfaces**

When we first identified exclusion zone water, many suspected it might be the same as polywater—not in any constructive sense, but in the sense that it might have arisen from a similar experimental error. One prominent physical chemist suggested this possibility to me rather directly, claiming that all he really wanted to do was to save us from the ignominious fate of those involved with polywater.

We responded by adding contaminants to the water. We wanted to see whether contaminants built our exclusion zone in the same way that they had been asserted to build polywater.

We found the opposite: practically anything we added to the water diminished the size of the exclusion zone instead of expanding it. The largest exclusion zone correlated with the purest water.

That result told us one of two things: either exclusion zone water was not the same as polywater because it behaved oppositely; or, if EZ water was the same as polywater, then the attacks on polywater might have been unjustly motivated by issues beyond science. At any rate, the polywater spectre threw no monkey wrench into our works; we felt justified in exploring exclusion zone water on its own terms.

The name "exclusion zone", by the way, originated with my Australian friend John Watterson, who also suggested the abbreviation "EZ". Now that we know that the exclusion zone does more than just exclude, this moniker might be less than ideal. Nevertheless, EZ does have an easy ring to it, and the term seems to have stuck. For now, we continue to use it.

The central question we faced was the exclusion zone's molecular structure. We felt that it had to differ from bulk water, for EZ water was observably more stable, more viscous and more ordered. But what was that structure?

### **Stacked Dipolar Water**

We first considered the most obvious candidate: a simple, ordered stack of water molecules. Stacking is possible because the water molecule is a dipole: it comprises an electrochemically negative oxygen atom at one end and two electropositive hydrogen atoms at the other (figure 4.3). Because of that charge polarisation, dipoles naturally tend to stack; hence, it seemed reasonable to consider the EZ's ordered structure in terms of dipole stacking. Figure 4.4 (below) illustrates this model.

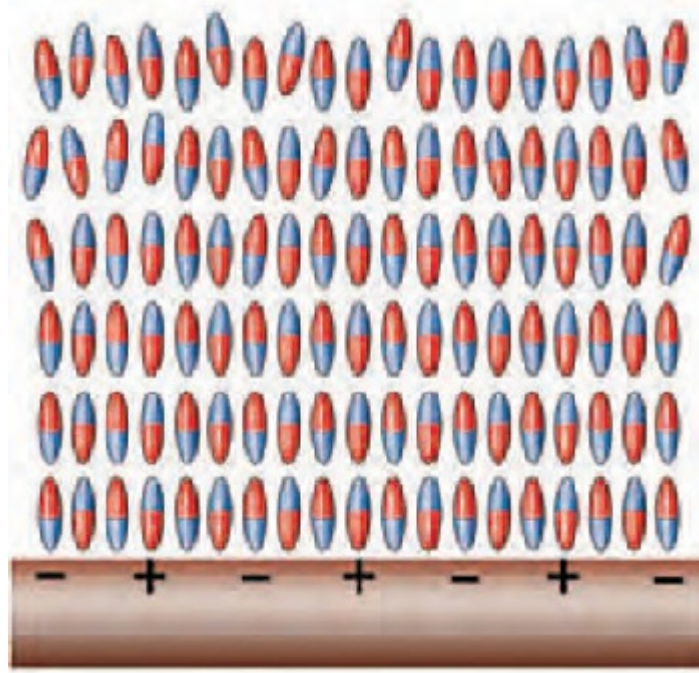


Figure 4.4: Stacked dipole model of water ordering. Some loss of order might occur with increasing distance from the surface because of thermally induced motions.

The stacked dipole configuration would seem to be the obvious solution to our problem. Beginning at the nucleating surface, water dipoles would stack one upon another, projecting farther and farther from the surface until the disruptive forces of "thermal" (Brownian) motion limited further ordered growth. How far such an ordered crystal might build depends on various assumptions. Most chemists would argue for no more than a few molecular layers, while others would argue for an almost unlimited stacking.<sup>2,3</sup>

The stacked dipole model's most fervent advocate has been Gilbert Ling. A world-class scientist, Ling built a comprehensive theory of cell function on the basis of ordered water, implicitly presuming the dipolar arrangement.<sup>4</sup> His cell-function theory had seemed so compelling to me and to some others that even in relatively recent writings<sup>5</sup> I could find no reason to question its basis: the simple stacking of water molecules. In fact, that arrangement had seemed the only plausible option.

Later, we found cause to reconsider. Although the stacked dipole model may apply in certain circumstances, newer evidence implied that it could not represent the general case. That evidence centred on the fact that the exclusion zone bears net electrical charge. Dipoles remain neutral; they cannot build up to yield extensive zones with net charge.

Meanwhile, unaware of the presence of that EZ charge, we proceeded to evaluate alternative candidate structures to make sure that we were on a sound course.

### **Crystalline Water**

A good way to deduce possible structures is to start by looking for a precedent. If exclusion arises from ordered water, then a logical approach involves investigating known ordered water structures.

Perhaps some variant of one of those structures might suffice. We saw ice as the most obvious candidate. Ice has a well-known ordered structure. And ice excludes: as it grows, it pushes out molecules and particles, creating a crystal largely free of debris. Could ice's structure offer a clue to EZ structure?

The planes of (standard) ice are arranged in hexagonal units (figure 4.5 below).

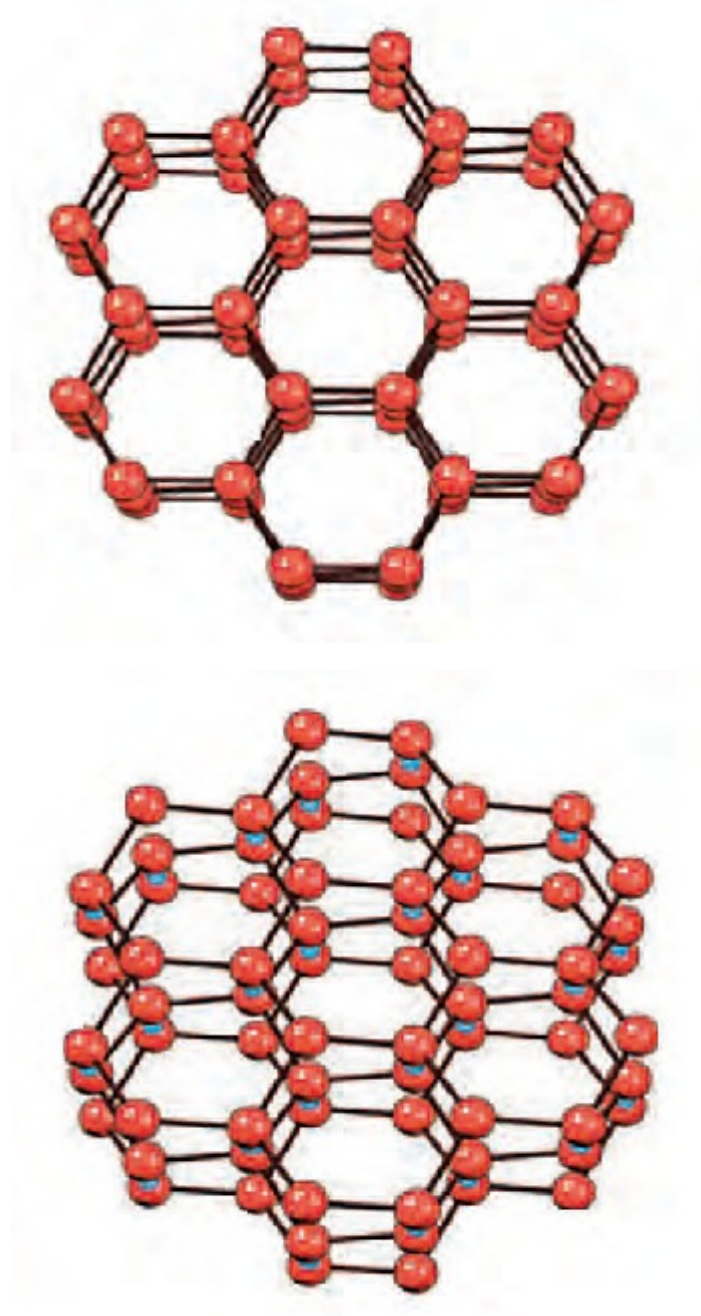


Figure 4.5: Structural model of common ice viewed from two different angles. Oxygen atoms are red. Hydrogen atoms (not shown) lie midway along the lines connecting the oxygen atoms. Interplanar protons (blue, bottom) link every other oxygen. The linkages create a pucker, which makes the arrangement of atoms seem less planar and more tetrahedral.

Repeating units create the familiar honeycomb sheet made of oxygen and hydrogen. Protons (bottom panel) link each sheet to any sheets lying above and below. Those protons bond oxygen atoms, creating ice's rigid structure. Only every other oxygen is bonded; the remaining oxygens, being electronegative, repel one another, creating the slight pucker evident in each planar sheet.

The exclusion zone, on the other hand, is not rigid; it behaves as a viscous liquid. This means that the structure of ice does not adequately model the EZ's structure. A minor tweak of that ice structure, however, provides a possible EZ candidate. The correct EZ structure requires some fluidity; liquids gain their fluidity when constituent layers can slip past one another. For the exclusion zone, then, a model worth considering is a stack of ice-like planes devoid of those rigidifying interplanar proton linkages. Without the linkages, the planes could slide past one another, conferring the required semi-liquidity. This model seemed promising.

## Polywater Revisited

Similar to the ice-like structure we have been considering, the polywater model envisions a stack of honeycomb sheets made up of hydrogen and oxygen atoms.

In a 1969 article in the respected journal *Science*, E. R. Lippincott and collaborating chemists from the University of Maryland hypothesised the molecular structure of polywater.<sup>6</sup> That polywater model made no headway at all. Because of polywater's discrediting only several months after the model's publication, nobody took the trouble to consider the proposed structure in any depth. Any and all attempts to investigate the nature of polywater were quickly laid to rest.

Lippincott *et al.* had deduced a honeycomb structure from a broad range of amassed physicochemical data. The data included Raman spectra, extreme freezing and boiling points, and high density. The structure depicted in figure 4.9 (below) best fits the experimental data.

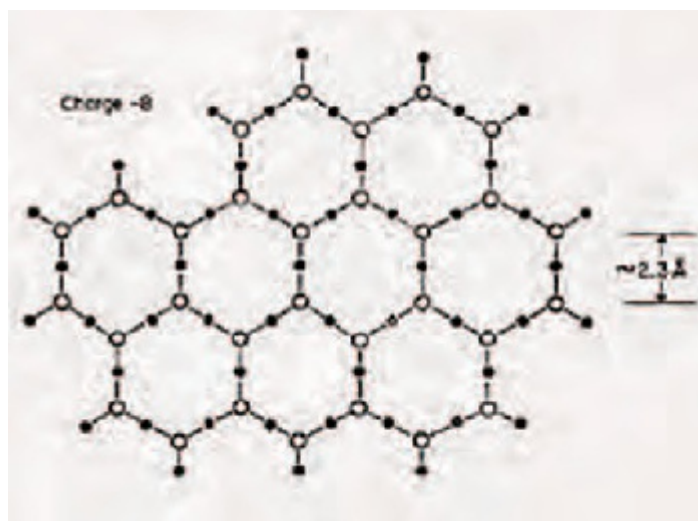


Figure 4.9: Molecular structure of polywater, proposed by Lippincott and colleagues. Oxygen molecules are denoted by open circles; hydrogens are solid. Sheets stack to yield volumetric structure.

Several aspects of that *Science* article struck a resonant chord. First, the article reminded me that nature likes hexagonal structures. You see them throughout the domain of organic chemistry. You also see this structure in graphite, where constituent honeycomb (graphene) sheets can slide easily past one another, resulting in low friction. Being common, hexagonal sheets seemed a natural option to consider.

Second, the authors provocatively stated that the substance in question is *not* water. The substance is certainly built of oxygen and hydrogen, but their arrangement in an hexagonal lattice bears little resemblance to their arrangement in the water molecule. This new substance, they asserted, "should not be considered to be or even called water, any more than the properties of the polymer polyethylene can be directly correlated to the properties of the gas ethylene". The authors considered it clear that this entity was chemically distinct from water.

A third feature, which really made me stand up and take notice, was the ratio of hydrogen atoms to oxygen atoms. As everyone knows, these atoms have a 2:1 ratio in bulk water. In this planar structure, their ratio is 3:2. This feature may not be immediately obvious, but figure 4.10 presents a simplified method for verifying the ratio. This numerology matters because the familiar 2:1 ratio confers neutrality. Two electropositive hydrogen atoms balance one electronegative oxygen atom, so the water molecule is neutral. The lattice, on the other hand, has an unbalanced ratio—yielding one negative charge per unit hexagon.

The authors made special note of this feature on the upper left corner of their figure (see figure 4.9), but they paid scant attention to its potential significance. In a matter-of-fact way, they presumed that positive charges lodged in between the negatively charged planes would neutralise most of the charge. The model's essential point was that the planes themselves were negatively charged.

The Lippincott polywater model is essentially the same as the model we put forth in these pages. The polywater model derived from strict physicochemical reasoning, while our model derives mainly from precedent and logical inference. Both routes lead to essentially the same result: a honeycomb sheet with a hydrogen-to-oxygen ratio of 3:2.

This 3:2 ratio has been experimentally implicated. A report in a prominent physics journal created a stir with a

finding of this very ratio: when protons and neutrons bounced off water molecules, the scattering pattern implied  $H_{1.5}O$ , not  $H_2O$ .<sup>7, w1</sup> Of course, the ratio 1.5:1 is the same as 3:2.

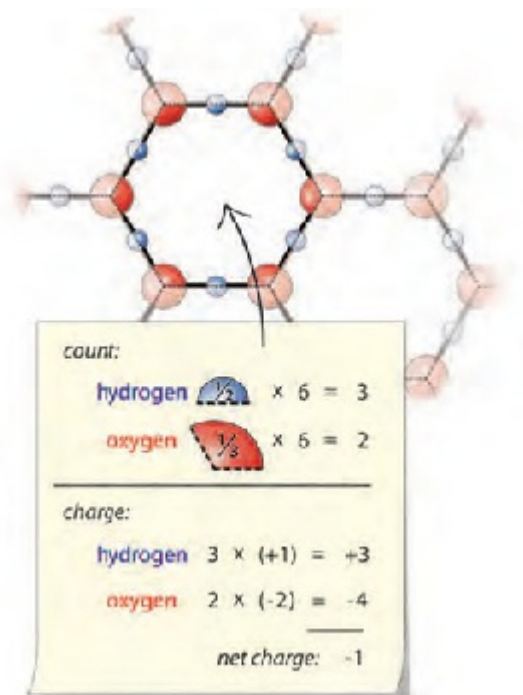


Figure 4.10: Computation of the net charge of each hexagonal unit. To make the count, represent each atom as a sliceable pie; then count all the pie fractions lying within a given hexagon, taking care to remember that the oxygen pie's charge is -2 while the hydrogen's is +1. The resulting ratio of hydrogen to oxygen is 3:2, and the net charge of the hexagon is -1.

The key feature of both of these models is the hexagonal arrangement of atoms, raising the question of whether hexameric (i.e., hexagonal) figures are experimentally observable. The answer is yes. Researchers have identified water hexamers next to diverse surfaces including metals<sup>9</sup>, protein subunits<sup>9</sup>, graphene<sup>10</sup> and quartz.<sup>11</sup> Near-surface hexamers have also been found in supercooled water.<sup>12</sup> Water adsorbed on mica showed a preponderance of 120° angles, which was interpreted as evidence for hexagonality.<sup>13</sup> The water next to many surfaces is evidently hexagonal, which agrees with the proposed model.

Of the evidence showing hexagonality, a study worthy of comment is one investigating water droplets encapsulated by protein (figure 4.11 below).<sup>14</sup>



Figure 4.11: Protein-encapsulated water. Encapsulation produces spheres (a) seen in the scanning electron microscope, and geometric figures (b) seen in the transmission electron microscope. Diffraction pattern (c) obtained from a geometric figure shows hexagonal order.

The specific protein is subunit C of ATP synthase, an ancient protein that appears throughout phylogeny. In dry conditions this protein forms an encapsulating shell around water, preventing evaporation.

Figure 4.11 shows two examples of these shelled structures: spherical capsules (panel a) and geometric capsules (panel b). Diffraction patterns obtained from geometric capsules show that the enclosed water has hexagonal order (panel c). Further, the hexagonal unit spacing, 0.37 nm, is close to that shown in figure 4.9. Thus, hexagonal order can be seen in substantial volumes of water near surfaces.

Another anticipated feature of these models is the absorption of ultraviolet (UV) light. Absorption at or around the

270 nm (UV) wavelength is expected when electrons are "delocalised", i.e., free to move through the structure. That situation exists most commonly in aromatic (ring) structures and also in so-called "crown ethers", whose oxygen-containing hexagonal structures are similar to the structure under consideration. Thus, the confirmed EZ absorption at 270 nm adds evidence in support of an hexagonal structure.

So anticipated UV absorption is confirmed, hexamers are experimentally detectable, and two independent sets of considerations lead to essentially the same hexameric model. This supportive evidence provides impetus to consider the model more seriously. Let us press on.

### Stacking Honeycomb Sheets

In exploring the proposed model's explanatory power, we must first determine how the honeycomb sheets stack to form the exclusion zone; after all, the EZ is a three-dimensional entity, not a single sheet. We also need to understand how the initial EZ layer forms. Let us first deal with how the sheets stack.

The simplest stacking model puts the hexagons of all planes in register. You could look down the stack of hexagons and see all the way through. This in-register arrangement is attractively simple—but impossible.

To appreciate why, look back at the top panel of figure 4.5, which shows an example of planes in register. Suppose you remove the interplanar protons (evident in the bottom panel). That creates the planar stack under negatively charged oxygen atoms in one plane with negatively charged oxygen atoms in the next plane. That would create interplanar repulsions in huge numbers. The structure would immediately fly apart.

A more natural way for the planes to hold together is by shifting them out of register (figure 4.12 below).

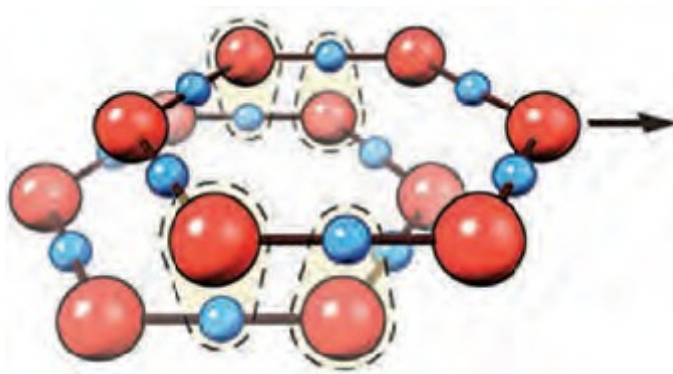


Figure 4.12: Shifting one plane relative to another puts opposite charges next to one another, creating attractions.

If the negatives of one plane lie opposite the positives of the next plane, then those planes could stick by electrostatic attraction.

Such a planar shift is theoretically realisable in two ways, but only one can do the job (figure 4.13 below).

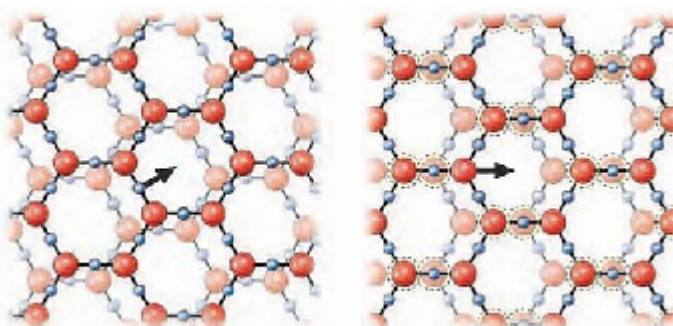


Figure 4.13: Possible plane-stacking arrangements involving linear shifts (panels a and b). Only the shift shown in the right panel (b) yields a stable structure with overlapping opposite charges.

The first mode involves a shift in the direction perpendicular to an hexagonal strut (panel a); the second involves shifting along a strut (panel b). In the first model, no degree of shift leads to any regular apposition of opposite charges, and hence no appreciable stickiness. In the second model, shifting by half the oxygen-to-oxygen spacing brings many opposite charges into apposition: one third of all planar charges stick. This abundant stickiness confers

ample cohesion. The cohesion in turn confers high density. Thus, this second model seems to work.

The planar shift also creates some repulsions: nearby like-charged atoms from respective planes repel one another. However, repulsions are fewer than the attractions; and those repulsive forces push away the repelling atoms, thereby weakening the net repulsive force. Indeed, our computations have shown that the attractive forces easily win out.

So the second model yields a stable structure that sticks together naturally. This model yields predictable mechanical behaviour: semi-solid when left alone, yet able to flow in response to an imposed shear force. Its behaviour should resemble gelatinous egg white.

Variants on that simple stacking theme lead to interesting structural variants. In figure 4.13 (panel b), successive planes of the stack are shifted rightwards, but they could just as easily be shifted leftwards. With these two options, you could build a left-tilted or a right-tilted edifice. In fact, the shift direction need not be restricted to left or right alone: planar shift could occur in any one of the six strut directions, leading to endless stacking options.

We can even realise helical stacking (figure 4.14 below).

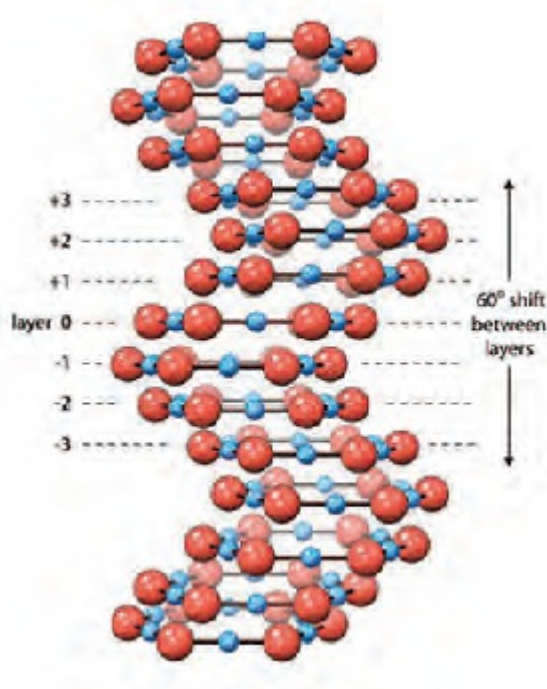


Figure 4.14: Shifting successive planes by 60° yields a helical structure.

Start with a base plane, shift the plane above it in the direction along a strut, shift the next plane 60 degrees to that strut, the next an additional 60 degrees, etc. The helical pitch would then comprise six planes. Larger pitches, even irregular pitches, are theoretically realisable. This helical feature may be especially relevant for biology, where EZ water needs to interface with the helically wound proteins and nucleic acids.

In sum, pouring water onto a hydrophilic surface triggers EZ growth. Water is the raw material. From this raw material, EZ honeycomb layers build. Those EZ layers can slide past one another if sufficient shearing force is applied; but ordinarily the planes stick to one another, creating what is seen macroscopically as the EZ.

#### **A Fourth Phase of Water**

A significant feature of the proposed EZ model is its similarity to ice. This similarity should not surprise: on that very basis, we derived our model of the EZ's structure. On the other hand, if ice qualifies as a phase of water then the EZ might likewise qualify— perhaps as the long-sought "fourth phase" of water suggested a century ago by the prominent physical chemist Sir William Hardy.

For the EZ to qualify as a phase (or a "state"), it would need to satisfy certain criteria: it should be unique and spatially bounded, and it must exist in a significant quantity. These criteria seem satisfied for water's three classical states (although the coming chapters raise some question about vapour). They are also true for the EZ: exclusion zones are bounded and uniquely structured, and can project from a surface by distances up to a metre. The EZ



seems as qualified as ice for consideration as a phase.

On the other hand, referring to the EZ's extensiveness can occasionally throw otherwise sober chemists into fits. How could any structure built of water molecules extend millions of layers from a nucleating surface? Educated to think that the disruptive effects of thermal motion will limit ordering to a few molecular layers, some chemists are prone to view the concept of long-range order as a nonstarter; it simply cannot happen.

However, we are not proposing a structure composed of stacked water dipoles but of *stacked planes*. The two differ.

Chemists might view a stack of dipoles as similar to a stack of bricks, made wobbly by the disruptive effects of thermal motion; since these disruptive effects are additive, the stack cannot grow very high before faltering.

It bears repeating that we are not positing a stack of dipoles but a stack of planes. Each plane is extensive; and the more extensive the structure, the lower the thermal agitation. So any disruptive effects should be far less pronounced in the planar stack than in the dipole stack. One might hope, therefore, that this planar model would prove less likely to provoke chemists into reflexive fits of outrage.

In a different vein, the planar model helps us to reconcile an issue that chemists have not resolved: why gels retain so much water. Gels hold their water. Common gels don't leak, even when their fractional water content exceeds 99.9 per cent of their total mass. Now we can venture an explanation of that phenomenon. The gel matrix comprises numerous hydrophilic strands. The strands' surfaces convert bulk water into EZ water. The EZ planes stick to those nucleating strands and also to one another; hence, your gelatin dessert remains hydrated. The EZ water doesn't dribble out.

Finally, the proposed structure makes clear why exclusion zones exclude. They exclude because it is only through the hexagonal openings that solutes can enter the EZ lattice, and those openings are small. The actual impediment is even more formidable: because successive EZ planes are out of register, the effective openings are narrower than the planar hexagonal openings. The lattice is extremely tight, and therefore highly exclusive of solutes. Only protons and smaller entities are small enough to penetrate.

On the other hand, protons ordinarily don't exist as distinct entities; they stick to water molecules to form hydronium ions, which are far bulkier than protons and therefore excluded.

Apart from those freed protons, it appears that *all solutes are excluded*— at least from lattice regions devoid of openings. Exclusion of even hydronium ions, with their positive charge, ensures maintenance of the electrical potential difference between the EZ and the water beyond. That's why we can measure the same potential difference over long periods of time.

The sustained charge separation between the EZ and the bulk water zone beyond has repercussions for much of what follows (see subsequent chapters). That charge separation constitutes a "battery". The character of the battery and the nature of the energy that keeps the battery charged will prove pivotal for understanding practically all phenomena involving water.

## Summary

In formulating a structural model of the exclusion zone, we first considered stacked dipoles. While simple, logical and historically grounded, dipoles remain stubbornly neutral; they cannot account for the exclusion zone's net charge. Therefore, the dipole model failed.

We found the honeycomb-sheet model more promising, its hexamers lying out of register with those of adjacent sheets. This model could account for the EZ's net charge; plus, it has the advantage of precedent because of its similarity to ice.

In this stacked-sheet model, local charge depends on the density of electronegative oxygen atoms. Thus, local electrical potential can range from extremely negative values to zero and all the way into the positive values characteristic of some exclusion zones.

The basic structural framework has enough versatility to account for all types of exclusion zone.

Real EZs differ from generic EZs. Generic EZs contain full hexagonal lattices. Real EZs are less regular: they may lack oxygen atoms and hydrogen atoms at positions that reflect the nucleating surface's charge distribution, and they may suffer erosion.

Exclusion zones seem both extensive enough and distinct enough to qualify as a separate phase of water. Recognition of this "fourth phase" has only just begun.

Its elucidation promises to shine light on what transpires when water touches practically anything in sight.

**About the Author:**

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**Editor's Note:**

This article is extracted and edited from chapter four of Dr Gerald H. Pollack's book *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor* (Ebner and Sons Publishers, Seattle, WA, USA, 2013).

Because of space constraints, we are unable to include all the text, the endnotes and some of the figures relating to chapter four. Readers can purchase Dr Pollack's book as a print edition or as an e-book, available in PDF, ePub and Kindle formats, from <http://www.ebnerandsons.com>. Dr Pollack's article "The Enigma of Water", extracted from chapters one and two of his 2013 book, was published in NEXUS 20/04.

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# Extraterrestrials and Intraterrestrials in Islam

The Qur'an, considered to be a scripture of revelation, refers to other worlds and their life-forms including corporeal creatures and exotic energy beings. A new unified view of physics, informed by quranic study, explains this diversity in terms of indivisible particles called "microbits".

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## Part 1: Extraterrestrials in Islam

*People of Earth, your attention please... This is Prostetnic Vogon Jeltz of the Galactic Hyperspace Planning Council... As you will no doubt be aware, the plans for development of the outlying regions of the Galaxy require the building of a hyperspatial express route through your star system, and regrettably your planet is one of those scheduled for demolition. The process will take slightly less than two of your Earth minutes. Thank you.*

- From *The Hitchhiker's Guide to the Galaxy*, by Douglas Adams<sup>1</sup>

In academic circles, when the captivating question of the possible existence of intelligent extraterrestrial life is debated, the validity of religions, which view humans as the only intelligent or superior species that God has created, is seriously undermined. Mistakenly, Islam is included in this list of "undermined religions". However, rather than undermining Islam, the possible discovery of extraterrestrials would actually reinforce and dramatically confirm that which is already contained in the Qur'an. In this article, we provide an overview of the Islamic perspective on this subject.

### We Are Not Alone!

According to Islam, we are certainly not alone. The Qur'an (chapter/Surah 42, verse/ayah 29, i.e., 42:29) states:

*And among His signs is the creation of the heavens<sup>2</sup> and the Earth, and whatever corporeal creatures [dabbatin] that He has dispersed in both of them. He is able to gather them together when He wills [idha yashao].*

There are several points that need to be elaborated upon with respect to this key passage. First, in the Qur'an the word *dabbat* or *dabbatin* refers to an entity that is comprised of and/or evolved from water, and it is stated that God has created every *dabbat* from water (*dabbatin min ma-in*) (see 24:45). The word *dabbat* also denotes any sentient, corporeal being capable of spontaneous movement.<sup>3</sup> Second, this passage states that life in this universe is widespread. Third, it portrays that one day, some time in the future, we will communicate and/or meet with extraterrestrial beings and that this will be one of the signs of the Creator—signs of design, wonder and power which reflect the Intelligence that originated the universe and its stellar inhabitants.

The reason why the statement regarding the gathering of corporeal entities in this universe relates to an event *in* the universe itself, rather than in the hereafter on the day of judgement, is because when the Qur'an states elsewhere (e.g., 10:45) that there will be a gathering of entities in the next life it does so in respect of their gathering unto God or an equivalent qualification.

However, in this particular passage (42:29), the gathering of life-forms is not between them and God but between themselves, gathering from a dispersed state.

Furthermore, when the word "signs" or "sign" is used, it means that the sign at some point will be realised or seen by human beings in this life. For example, in the Qur'an (10:92) it is stated that the pharaoh who chased Prophet Moses<sup>4</sup> will be preserved in his body as a sign for those who come after him. Indeed, the bodies of both Rameses II and Merneptah remain preserved today in the Egyptian Museum in Cairo as a sign for us, as has been discussed in detail by Dr Maurice Bucaille in his now famous book *The Bible, The Qur'an and Science*.<sup>5</sup>

If the creatures in the rest of the universe will be a sign for us, we must, at some point in space and time, realise it concretely. Let us hope that these entities are not as insensitive as Douglas Adams's "Vogons", quoted above, or as duplicitously cunning as the aliens in a now classic *Twilight Zone* episode who visit Earth purportedly *to serve man*.

Unbeknown to the simple Earthlings, "to serve man" actually meant literally "to serve man on a dinner plate" as opposed to being *in* service for man!

### Clusters of Earths

Remarkably, the Qur'an also states that there are other Earthlike planets, which consequently means that they are hospitable to life.

In connection with the following passage, it is important to note that the number seven (*saba'a* in Arabic) is often synonymous with "several" or "many", but it may also mean "exactly seven". The Qur'an (65:12) says:

*It is God who has created seven heavens [samawati] and of the Earth their like.*

How is this "of the Earth" that the Qur'an speaks of like the seven heavens? The word *sama* (plural *samawati*) refers to "that which is above" and has a contextual nature. In the Qur'an (67:3) and (71:15) it is stated that God created the seven heavens, one above the other. In addition, the "lower heaven" mentioned in 37:6 comprises planets (*kawkab*), indicating that the "lower heaven" or literally "the lower that which is above" points to a type of grouping—in this case, the grouping of planets around one star, i.e., the solar system.

Taking this linguistic and contextual evidence, we realise that "seven heavens" consequently refers to the hierarchically clustered way in which the universe has been structured. For example, we live in our solar system, and, of course, beyond our cosmic neighbourhood abound multitudes of other stellar systems. These stellar systems may be clustered, i.e., "bunched up" in terms of their relative proximity to each other. A cluster of these clusters of stars forms a galaxy, where our galaxy alone contains up to 400 billion stars.

But these galaxies themselves are also clustered, and these clusters of galaxies are likewise also clustered, i.e., they form superclusters. Astronomers estimate that the universe contains roughly 100 billion galaxies. If this "of the Earth" is like the seven heavens, then it means that there are *clusters of earths* as well, e.g., Earth-like planets orbiting nearby stars. This being the case, there would be countless Earth-like planets in the universe.

It is worth noting that the Prophet Muhammad also mentioned the plurality of earths:

*...Say: O God, the Lord of the seven heavens and whatever they cover, Lord of the earths [al-aradina] and whatever they contain... [Emphasis added.]*

- Quoted by al-Tabarani in his *al-Kabir* and *al-Awsat*.

### **The Nature of Extraterrestrial Intelligence**

All of this leads to the following intriguing question: if there are other entities on far-flung planets, are there any as intelligent as we are, or at least do they have the potential to be intelligent in the way we are?

Surprisingly, the Qur'an (17:70) does *not* state that we are the topmost species in the realm of the universe in our overall attributes, intellectual and/or physical:

*And indeed We have honoured the children of Adam, and We carried them by land and sea. We have provided them with wholesome things, having specially favoured them above many of those whom We have created.*

Yes, favoured "above many" but not all! Perhaps this verse is among the most overlooked in the Qur'an. Here it is explicitly implied that there may be at least one, but likely many other species superior to us in these respects. (In this *ayah*, "We" refers to God.)

The following *Surah.ayah* (13:15) categorically states that throughout the universe there are those who either obey or deviate in matters of belief, which by affiliation also implies that they would likely have parallel developments on their respective planets as on ours, in terms of God's sending down prophets to remind and warn them:

*And unto God [alone] falls in prostration whoever is in the cosmic systems [samawati, i.e., on planets in the tens of billions of galaxies] and on the Earth, willingly [e.g., good human beings and extraterrestrial beings who follow God's laws] or unwillingly, as do their shadows in the mornings and afternoons.*

The fact that shadows are being cast implies that they are in the form of physical matter rather than some type of energy. (According to the new unified view of physics postulated by M. Muslim and one of us [Nadeem Haque], there is no distinction between matter and energy as all particles are groupings of microbits, e.g., quarks at a higher level; only the rate of motion and the composition of the microbit groupings lead to any distinction. This is discussed further in Part 2 of this article.)

One of the reasons why many Muslims are not aware of these details about extraterrestrial life is because they have assumed that when the Qur'an declares beings in the "seven heavens and the Earth" as worshipping God, these passages refer to the angels or birds. However, interestingly enough there are two mentions which tell us that there are entities other than the angels or birds that are in the "heavens".

*Surah:ayah* 24:41 factors out birds, whereas 16:49 mentions angels separately and factors them out of the group "corporeal creatures" as follows:

*For, before God prostrates all that is in the cosmic systems as well as on the Earth—corporeal creatures [dabbatin] and the angels...*

To underscore the exposed evidence for extraterrestrials in Islam, here is a *tafseer* (commentary) on the quranic *Surah ayah* 65:12 by one of the closest and most trusted companions of the Prophet Muhammad, Abdullah Ibn Abbas. When questioned about this verse, Ibn Abbas said:

*If I tell you its details, you would disbelieve, meaning you would reject it. (Then he said:) There are seven earths, and every Earth has a prophet like your prophet, Adam like Adam, Noah like Noah, Abraham like Abraham, and Jesus like Jesus.*

- Quoted by al-Suyuti in his *al-Durr al-Manthur*, 5:581-582.

*If these extrasolar worlds do have or have had prophets, then they must have or have had revelation. Is there someone out there in the vast reaches of space, on a bluish-green or other shaded dot circling a lonely star or a binary star system, writing an article that refers to us as the extraterrestrials? It is indeed something to ponder about.*

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## **Part 2: Intraterrestrials in Islam**

by Nadeem Haque

According to the Qur'an, throughout the universe other beings exist that are not carbon or water based. Instead, they are comprised of forms of energy. Let us call this class of being *intraterrestrials*, because they are present among us, unseen, according to the Qur'an. These intraterrestrials are of various kinds.

There are the *jinn*, which the Qur'an states are made of "a smokeless flame" (*marijin*)<sup>1</sup>, the word *jinn* coming from *janna* which means "he [or it] concealed"<sup>2</sup> (i.e., that which is hidden).

There are also the angels. The word for "angels" in Arabic is *malaaiakah*, and if the root word is taken as *malk* then this means "forces"—in this case, entities that act like forces but conscious forces-cum-functionaries, i.e., those who follow God's commands 100 per cent<sup>3</sup> and with the same efficiency and cannot make errors of any kind.

Angels can move around at great speeds<sup>4</sup> and they possess shape-shifting properties.<sup>5</sup> The Prophet Muhammad stated that angels are created from light (nur).<sup>6</sup>

There are many classes of angel. Jibreel, or Gabriel, is described as a powerful entity<sup>7</sup> who brings revelation to humans, although in the Qur'an he is never mentioned as one of the angels explicitly but is singled out by the word *al-Ruh*, commonly translated as "the Spirit", and is accompanied by angels.<sup>8</sup> Angels do not have wings like those of birds—this is a remnant of mediaeval thinking—but the Qur'an does speak of what is usually thought of as wings (*ajniha*); however, the root meaning of this word is "sides", from the Arabic *janaha*, and the Qur'an speaks of them as having multiple sides.<sup>9</sup> In other words, this implies that angels are able to impart a directional force, using their "sides", in order to travel huge distances that can be equal to or surpass the speed of light in a vacuum.<sup>10</sup> They achieve this by using their will, just as we use our will to direct our limbs into walking.

On the other hand, the *jinn*, unlike angels, have "free will" like humans in that they can choose either to follow or to disobey the laws of God. In other words, like humans, some are obedient to God whereas others are rebellious. Iblees (Shaytaan or Satan) is of the *jinn*<sup>11</sup> and became one of the rebellious ones<sup>12</sup> by refusing to prostrate to Adam, as commanded by God. Iblees still exists and God has given him leave to entice others onto the wrong path as a test, structuring a moral law which creates a situation where only those who believe and follow the laws of God will be secure and safe from harmful enticements.<sup>13</sup> In other words, it is indeed the evil among the *jinn* who try to seduce humans into going against the laws of God, but only those who adamantly pursue wrong temptations are led to this path.<sup>14</sup>

Among the *jinn*, there are those who have the ability to move very quickly and transport objects very speedily.<sup>15</sup> They, like humans, have many powers and limitations and are not omniscient. For example, the evil ones among them were bound by Prophet Solomon and made to work for him for a long period. In fact, they did not even realise that Solomon had died while literally sitting on his throne until a "lowly" creature on the ground ate the staff upon which he was leaning and he summarily fell to the ground.<sup>16</sup>

## **The Celestial Highest Chiefs (CHCs)**

In addition to the *jinn* and the angels, other created entities also exist that have the capacity to choose but are neither *jinn* nor angels. The Qur'an alludes to them in two passages: "They cannot listen to the Highest Chiefs [*almala-i al-aAAla*] for they are pelted from every side"<sup>17</sup> and "I had no knowledge of the Highest Chiefs when they disputed".<sup>18</sup>

Note that the disputation of the Celestial Highest Chiefs is an indication that they are not angels but are "free-willed" entities who have various views on issues. They are argumentatively discursive about the affairs of other entities in the universe and God's plans, and in this way they constructively engage each other about their individual views. This type of discursiveness is something which is absolutely not characteristic of angels, be they upper-echelon angels or not.

In addition, these entities are among those referred to in 17:70, cited in Part 1 with respect to extraterrestrials. In other words, these are some of the beings more favoured than the Children of Adam in terms of the overall favours bestowed upon them. These entities are a type of powerful, "highly spiritual" being of the lighter microbitic particle kind who are close to God and glorify Him; they are probably engaged in serious tasks to which we are not privy. The Qur'an is silent about the details of these entities; in fact, most Muslims themselves are not even aware of the possibility of their existence.

Not much more can be said about them other than that they converse on high matters directly with God, for, logically speaking, being the highest chiefs there is no barrier to such communication. In other words, the CHCs do not require the intermediation of archangels (such as Jibreel) for two-way conversations with God.

### **The Non-existence of Poltergeists?**

It is surmised by Muslims that non-Muslims who experience poltergeists are actually being fooled by the evil-cum-mischievous *jinn*, because according to the Qur'an there are no such things as ghosts. When one dies, one cannot return due to the *barzakh*<sup>19</sup>—the barrier between the living and the dead, between this life and the afterlife.

Can a New Unified Physics Explain Intraterrestrials?

Can such intraterrestrial beings exist according to physics, and, if so, what would they be comprised of?

Here is a very brief summary of in-depth investigation of these quranic claims, anecdotal interviews, analysis of the Qur'an and the Hadith (teachings and sayings of the Prophet Muhammad), and actual "field experimentation" by M. Muslim and this author.

According to the new unified view of physics developed by us, there is only absolute space with particles out of which everything is comprised.<sup>20</sup> All particles, matter and energy are composed of the tiniest indivisible particle called the *microbit*. Everything is therefore a grouping and structuring of microbits, and all energy is thus defined as the effort required to move microbits.

Since everything is comprised of microbits, everything in that sense is a form of energy, human beings being the slower spectrum of that energy (hence matter). In this view, particles such as quarks, electrons and photons are breakable and are comprised of smaller groupings of microbits; they are not elementary. The *jinn* and the angels are comprised of such smaller particles.

The water/carbon-based body is cohesive due to a balance of forces and synchronisation due to photons and electrons in signalling, etcetera. The carbon-based body is also made of microbits, albeit larger and more dense groupings of them in the form of atoms, molecules, DNA, etcetera.

Similarly, these intraterrestrials are also made of microbits but are differently organised.

The proof for this is from the Qur'an and Hadith in the following aspects. When the Prophet stated that angels are comprised of light, what he meant was that they are made of subtle small particles, smaller than the photon, because the word "from" (*min* in Arabic) can mean an extract of something (as, for example, in the case of embryology): "We created you from a *nutfatin amshajin*".<sup>21</sup>

What is being referred to are the cells in the seminal fluid, i.e., an extract from something larger. In other words, what is extracted is part of a larger whole.

As previously noted, the *jinn* are comprised of "a smokeless flame" according to the Qur'an.<sup>22</sup> We cannot generally see *jinn* and angels because our vision uses photons, and the image processing cannot occur due to the way the photons interact with the particles comprising these entities.

They can increase their opacity by densifying the microbitic particles to form an exterior shell-like surface area, thus "manifesting themselves" as they did with Prophet Lot<sup>23</sup> and other non-prophets who were present, and then one can indeed see them in the particular form in which they choose to appear. It is because the *jinn* are comprised of less dense and smaller particles that the *jinn* see you but you do not see them.<sup>24</sup>

*Surahayah* 24:45 of the Qur'an says that every *dabbat* is made from water. In other words, all the carbon-based creatures are indeed made from water. The parallel mention in 21:30, which states that all living things are made from water, refers only to those entities visible to the deniers of the truth of the Big Bang and God. That is, 21:30 refers to only carbon-based creatures as detailed in 24:45, though 21:30 would also include plants.

Therefore, 21:30 excludes the intraterrestrials, since angels and *jinn* are not made from water but are nonetheless living beings. However, note that these intraterrestrials do not have internal organs like us, and that, unlike the *jinn*, angels do not eat food like we do.<sup>25</sup> Creating a manifestation for normal human vision would generate a temporary re-organisation of their structure with no internal human-like organs for processing food, etcetera.

Angels are in charge of escorting the consciousness of human beings after earthly death<sup>26</sup>, communicating peace to the psyche of high-moral-calibre human beings<sup>27</sup> and even communicating in special circumstances with those who are not prophets, such as Mary, mother of Jesus.<sup>28</sup> However, the door to scriptural revelation has been closed with Muhammad, the last Prophet.<sup>29</sup>

### Extra-intraterrestrials

*Jinn* can travel in space outside the Earth.<sup>30</sup> The angels, too, are reconnoitring all over the universe<sup>31</sup> and they are therefore not limited to the Earth. In addition, according to the Qur'an, the destiny of carbon-based creatures is linked with intraterrestrials in the sense that the evil ones among them are prone to interact with humans by whispering evil suggestions to their minds, unbeknown to the humans, or by direct, open communication if the humans have gained access to them.

Considering the uniformity of the basic processes and plan of God, it would be safe to assume that these intraterrestrials would also be present on other Earthlike planets with the carbon-based extraterrestrials. They could therefore be termed, mind-bogglingly, *extra-intraterrestrials!*

We can clearly see from the quranic perspective that a much greater degree of diversity exists in life-forms than conventional, disunited physics and narrow modes of laboratory experiments have yielded or would have us accept.

Over the last 50 years or so we have been looking for extraterrestrials outside the Earth, on distant stars, but we have become oblivious to the possibility that subtler life-forms might indeed be co-existing with us.

We humans need to expand our peripheral vision and thinking to include these astounding spiritual-cum-scientific possibilities if we are indeed to grow and thwart a very anthropocentric and stunted view of the domains of reality that has artificially dichotomised "scientific" and "religious" experiences.

### About the Authors:

- Nadeem Haque is a researcher and the author of several nonfiction and philosophical fiction books as well as numerous articles focusing on several areas at the frontiers of knowledge: consciousness, the foundations of evolution, physics unification, the history and philosophy of science, environmentalism, animal rights and human history. His main goal has been to show the unity between "science" and "religion"—one of the most crucial areas facing humanity today. Nadeem Haque is the grandson of pioneering Islamic scholar al-Hafiz B. A. Masri, who wrote the book *Animals in Islam* and whose work he has now extended. He resides in Canada where he works as a civil engineer. He is also Director of the Institute of Higher Reasoning (see the Facebook page <https://www.facebook.com/instituteofhigherreasoning>). Nadeem Haque is contactable at [nhaque@mail.com](mailto:nhaque@mail.com).

- Zeshan Shahbaz, who also lives in Canada, is the Head Researcher of the Institute of Higher Reasoning (see the web page <http://instituteofhigherreasoning.page.tl/>). He has an interest in religion, philosophy, human rights and sociopolitical issues, and has had a number of his papers published in these areas. He can be contacted by email at [zshahbaz@mail.com](mailto:zshahbaz@mail.com).

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29. Qur'an 33:40
30. Qur'an 55:33



**31.** Qur'an 16:49 and 53:26

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## Whistleblower Claims Multiple Secret Space Programs Are Concerned About New Alien Visitors

by Michael E. Salla, PhD  
© March 2015

A new whistleblower has appeared who is creating quite a stir in the UFO and exopolitics communities due to his claims of having worked with a number of secret space programs and, more recently, having become a contactee with a powerful new group of extraterrestrials that have entered our solar system.

Using the online pseudonym "GoodETxSG", the whistleblower (whose name is Corey Goode) has described in interviews and posts on two major online forums his former covert background with a number of these secret space programs run by various military, corporate and earlier human civilisations. He says that, contrary to widespread perceptions in the UFO research community of a single secret space program belonging to a breakaway civilisation, there are in fact up to 10 breakaway civilisations indigenous to Earth. Each of these, according to Goode, has its own secret space program.



SPC James C. Goode, Texas State Guard. (Source: radaris.com)

He says that there are currently three major secret space programs belonging to various national and international entities on Earth. One of these is a large corporate entity similar to what is described in the movie *Avatar*. The other two are multinational covert space programs that are similar to NATO in their manner of operations and activities. In addition, he says that there are between five and seven secret space programs belonging to earlier breakaway civilisations on Earth including Nazi Germany, and another dating as far back as an astounding 500,000 years ago!

Adding another level of complexity to what is really happening with the various secret space programs, Goode says that off-world extraterrestrial civilisations interact or collaborate with one or more of these secret space programs.

In a comment responding to the claims of another alleged whistleblower from a secret space program, Randy Cramer (aka Captain Kaye), Goode summarised the complex situation:

"There are many who have been a part of the three separate secret space programs that are independent of the secret Earth governments, one of which is a powerful interplanetary corporate conglomerate that owns most of the

Mars bases.

"There are also 5-7 ancient Earth breakaway civilizations that have bases here on Earth. All of the groups mentioned above are allied' with various and different 'off-world entities' and UN-type federations' both with the human-like ETs' and the non-human ETs', all with *different agendas*.

"There is also a 'shadow civil war going on among some of these secret space programs and their 'off-world allies' to end control of the secret Earth governments using the Babylonian Money Magic Slave System' to control Earth humanity . . ."

A significant point Goode's postings is that concerning the threat posed by artificial intelligence (AI). According to Goode, AI has been developed by multiple extraterrestrial civilisations that have created synthetic AI humanoids, only to have them turn against their creators in a manner similar to what is depicted in the remake of the television series *Battlestar Galactica*. Consequently, all secret space programs have created security procedures to identify individuals displaying evidence of AI influence.

As a last resort, individuals trained as intuitive empaths were employed to identify AI influence as well as any form of deception. This was the main job that Goode says he performed during his 20-year tour of duty.

More recently, Goode claims that up to 100 spherical ships have entered our solar system, possessing technology far in advance of anything used by the different secret space programs and their respective extraterrestrial allies.

Goode says that extraterrestrials from this "Sphere Alliance" have been physically contacting him and other private individuals to disclose information about major new events that will profoundly change life on Earth. He says that this Sphere Alliance is assisting humanity in breaking free of the control exerted by powerful elite organisations on Earth, what he calls the "Babylonian Money Magic Slave System".

Goode claims that he and 70 other private citizens were recently taken to a secret space location for an "alliance conference" where, along with about 120 others representing the different secret space programs, the Sphere Alliance revealed some of its plans.



Artistic depiction of Goode being taken to Lunar Operations Command, by a blue sphere. (Source: Exopolitics.org)

Among the extraterrestrials from this alliance who interacted with the conference delegates, according to Goode, is a Blue Avian race up to eight feet [ $\sim 2.4$  metres] tall and a taller, 10-foot [ $\sim 3.1$ -metre], thin golden-brown being with triangular head and blue eyes. The Sphere Alliance apparently is intent on helping bring about full disclosure of extraterrestrial life.

### **Goode's Consistent Claims**

Goode has been sharing his information with David Wilcock, who apparently vetted Goode with other confidential sources and found him to be credible. Wilcock has subsequently incorporated Goode's testimony into a number of public presentations attempting to outline the full complexity of issues concerning secret space programs and visiting extraterrestrial life.

Wilcock is a major proponent of the idea that extraterrestrial disclosure is imminent due to the collapse of the elite control system that has been in place for centuries. He accepts Goode's information as validation for his optimistic pro-disclosure position.

Before offering my own evaluation of Goode's claims, it's good to review what is known about his recent public activities.

Goode first became widely known because of two audio interviews he gave that were initially promoted through the Project Avalon forum in October 2014. He previously had been a long-time member of Project Avalon, where he had shared personal information but not his covert background in various secret space programs.

That changed in September 2014 when Goode consented to do an informal sit-down conversation with a Project Avalon member on behalf of the forum's founder, Bill Ryan. The conversation was intended to be used solely for

Ryan's personal research, but Goode was persuaded to have it published on Project Avalon with the proviso that all steps would be taken to keep his identity anonymous. While this introduced a wide audience to Goode's experiences with different secret space programs, this ultimately led to his identity being exposed on the forum and ultimately a break with Ryan and Project Avalon.

Currently, Goode is posting on a new forum, The One Truth, where he is answering questions and informing members of new developments. He also has a website which has much of the information he has shared on the two forums [visit the website <http://spherebeingalliance.com>].

How credible is Goode? According to Wilcock, Goode's testimony is consistent with multiple other insider sources discussing secret space programs and extraterrestrial life.

In my own database of whistleblowers, contactees, leaked documents and breaking news on the secret space program(s), I have found nothing awry in Goode's claims.

His claim of separate space programs is consistent with Randy Cramer's claims that he served with the Earth Defense Force, a multinational alliance, for 17 years on Mars to defend five civilian bases belonging to the Mars Colony Corporation.

In his alleged 17 years on Mars, Cramer claims that he never once ventured into the Mars Colony Corporation facilities, even for R & R. That appeared strange to me when I first heard of it. That degree of formal separation between military and corporate bases on Mars, however, supports Goode's claims of separate space programs.

Goode claims that he served a 20-year tour of service with the secret space program(s) before being age-regressed to a time shortly after his duty began. Essentially, this has allowed him to live a 20-year time-span twice.

Also, Goode's memories were wiped or "blank slated". Now a civilian, Goode was encouraged not to rejoin any military service in case that triggered memory recall of his prior 20-year service. This is consistent with the claims of Michael Relfe (The Mars Records) and Randy Cramer (Earth Defense Force) who say that they went through a similar security process.

Furthermore, Goode discusses 22 extraterrestrial races that have genetically intervened with the human genome. They comprise a UN-type federation of "off-world" beings interested in humanity. This is consistent with the testimony of the "contactee" Alex Collier, who claimed that extraterrestrials from Andromeda had revealed to him that a total of 22 extraterrestrial races provided the genetic material for humanity. In a nutshell, we are a composite of a lot of different races, 22 to be exact. It is a physiological fact that there are 22 different body types on the planet, and that is the result of the extraterrestrial races.

While there has been no concrete evidence offered to corroborate Goode's testimony, his claims are consistent with those of other whistleblowers and/or contactees on a number of significant issues.

### **Mind-Controlled Space Personnel**

It's clear from the perspective of anyone viewing Goode's extensive postings and commentary that he sincerely believes that his claims are based on truthful events and experiences.

Nevertheless, it is always possible for an individual to pass on implanted memories sincerely, as truthful testimony, even though they have been fabricated to serve the agenda of one or more shadowy intelligence corporate organisations.

In the original 1962 film *The Manchurian Candidate*, mind-controlled military personnel were given false memories and programmed to act in ways that served the interests of shadowy entities behind the scenes.

Project MKUltra was exposed by the 1976 Church Senate Committee to be a real CIA mind-control program that targeted thousands of individuals. Mind control through the use of false, implanted memories would have become even more sophisticated over the decades with the development of more powerful computers.

It's possible or even likely that implanted memories have been used for those who have previously served in secret space programs and undergone a blank slate mind-control experience when reverting to civilian life.

This would enable former covert space operatives, now working as private civilians, to continue to be of use in any psychological warfare operations against the US or world public.

It's important to point out that Edward Snowden's National Security Agency document leaks confirm that online covert operatives have indeed been used to subvert the public about the UFO issue.

With different mind-control techniques being used on former secret space program personnel, this does not mean that *all* recovered memories are false or compromised. Individuals may be programmed to release genuine

information along with disinformation as a means for an agency to fulfil an agenda that evolves with time.

It's also possible that former secret space program personnel have succeeded in removing most if not all implanted memories or mind programming.

It's worth mentioning that in the cases of Michael Relfe and Randy Cramer, both underwent years of extensive deprogramming to remove signs of mind control and get to the truth of their experiences.

### **A Cautious Approach**

At this stage, it's vital to separate Goode's claims about 20 years of service with multiple space programs from his more recent claims of being an extraterrestrial contactee.

Importantly, the latter experiences, from his public statements so far, provide information about current off-world events that can be corroborated by others attending the alleged Sphere Alliance conferences. If 70 private individuals attended the same event, it can be expected that some will soon also go public and offer their versions of what happened.

Significantly, there does not appear to be any mind control involved in Corey Goode's claimed contact experiences. If confirmed by others stepping forward, his contactee experiences will support the validity of his claimed earlier experiences with secret space programs.

Researchers need to be very cautious when examining testimony of whistleblowers that have been subjected to mind control as a standard security measure during their alleged service in one or more secret space programs.

Goode may very well be one of the most significant whistleblowers ever to come forward, with his claims of 20 years' service with multiple secret space programs, if confirmation can be found. His current revelations about an alien Sphere Alliance may be even more significant if events transpire as he suggests, and also offer a means of confirming his alleged prior covert service.

At the moment, it's important to keep an open mind while remaining cautious when examining the full extent of Corey Goode's claims concerning multiple secret space programs and their reactions to a powerful new group of visiting extraterrestrials supportive of full disclosure.



### **About the Author:**

Michael E. Salla, MA, PhD, based in Hawaii, USA, is a pioneer in the development of Exopolitics, the political study of the key actors, institutions and processes associated with evidence of an extraterrestrial presence. In 2005 he founded the non-profit Exopolitics Institute (see [ExopoliticsInstitute.org](http://ExopoliticsInstitute.org)) and the popular website [Exopolitics.org](http://Exopolitics.org).

He is the chief editor of *Exopolitics Journal*, which he founded in 2006.

Dr Salla has held academic appointments in the School of International Service and the Center for Global Peace, American University, Washington, DC (1996-2004) and at the Department of Political Science, Australian National University, Canberra, Australia (1994-96).

He taught as an adjunct faculty member at George Washington University, Washington, DC, in 2002. He has an MA in philosophy from the University of Melbourne, Australia, and a PhD in government from the University of Queensland, Australia.

NEXUS has published many articles by Dr Salla, including "Monroe Planned to Reveal that JFK Saw Crashed UFOs" (22/02), "Eisenhower Threatened to Invade Area 51 and S4" (20/04), "John F. Kennedy and the UFO Connection" (16/06-17/01), "Secret United Nations Meetings on UFOs" (15/03) and "The Secret War on ET Contactees" (15/02).

His books *Exposing U.S. Government Policies on Extraterrestrial Life* and *Exopolitics: Political Implications of the Extraterrestrial Presence* were reviewed in NEXUS 17/01 and 11/05 respectively.

Dr Salla can be contacted by email at [drsalla@exopolitics.org](mailto:drsalla@exopolitics.org) or via his website <http://www.exopolitics.org>.

(Source: *Exopolitics.org*, 27 March 2015, <http://tinyurl.com/qegkncZ>)

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# BOOKS

Reviewed by Ruth Parnell

## HOLD THE PHONE

by Alison Wilson

Avonside Press, NSW, Australia, 2013

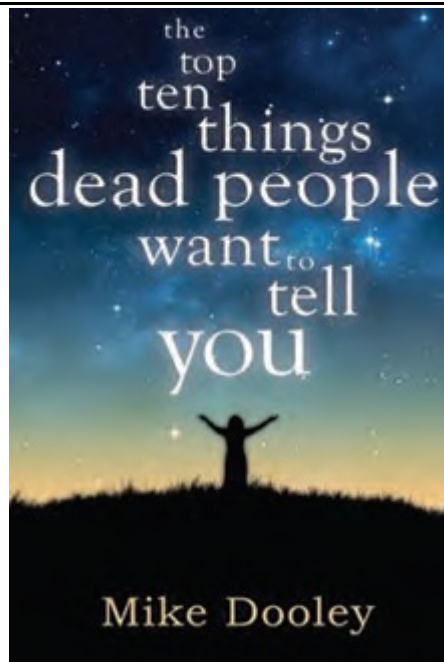
ISBN 978-0-9922865-0-7 (236pp tpb)

Available: [www.holdthephone.co](http://www.holdthephone.co)

Sufficient scientific and medical studies on the dangers of microwave radiation emissions from mobile and cordless phones as well as wireless technologies have been published to warrant a precautionary approach. Yet we're still happy to adopt the technologies foisted upon us for our convenience.

After years of research, building biologist Alison Wilson has written an essential guide to living more safely with these devices and technologies. In *Hold the Phone*, and its more scientifically detailed companion *Hold the Phone: Here's Why*, Wilson presents facts and safety tips about phones and wireless systems. She focuses on children and pregnant women, and the health problems with Wi-Fi in schools. She includes boxed, referenced quotes from independent scientists, engineers, public advocates and other professionals. She also provides extensive references and resources.

With research increasingly showing disturbing health effects—from dizziness, headaches, insomnia and palpitations to ADHD, cancers, DNA disruption and fertility problems— we need to become better informed and reduce the impact of these ubiquitous technologies. Wilson's books offer workable solutions for improving our health and wellbeing.



## THE TEN TOP THINGS DEAD PEOPLE WANT TO TELL YOU

by Mike Dooley

Hay House, London, UK, 2014

ISBN 978-1-78180-394-3 (224pp pb)

Available: [www.hayhouse.co.uk](http://www.hayhouse.co.uk)

Life is what we make it, but so many of us don't make the most of it. Mike Dooley, bestselling US author, reality

teacher and participant in the film *The Secret*, believes that the dearly departed have much to communicate about how we can live our earthly lives with more love, happiness and freedom. How he knows this he doesn't quite explain, but these messages from beyond strike home and give us impetus to live life more fully. These insights are also relevant for those who are grieving the loss of loved ones and need some empowering advice to help them reshape their perspectives and get on with living.

Among the top 10 pieces of advice are: they're not dead; they were ready to leave when they did; they're sorry for causing any pain; dreams really can come true; and love is the way, while truth is the path. Within these 10 categories are some true gems: thoughts become things; time and space can make opposites possible but they don't necessarily have to exist; and miracles, divine interventions and coincidences won't happen unless you define what you want in terms of the end result and show up every day, moving in the direction of your dream. Dooley urges us to go for love, expand our thinking and dare to see the greater truths. This is simple but liberating advice. (Visit Dooley's website [www.tut.com](http://www.tut.com) for more information. )

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#### BIOHISTORY:

Decline and Fall of the West

by Jim Penman

Cambridge Scholars Pub., UK, 2015

ISBN 978-1-4438-7130-3 (283pp pb)

Available:

[www.biohistory.org](http://www.biohistory.org)

[www.cambridgescholars.com](http://www.cambridgescholars.com)

Why civilisations rise, decline and fall has occupied academic minds for a long time. One of the frontrunners in this field is historian Dr Jim Penman, also a successful businessman, who has devoted decades to developing his theory of biohistory, a theory that he considers can be tested scientifically.

According to Dr Penman, answers can be found not in economics or politics but biology, and new findings from epigenetics are providing explanations for observable historical and demographic patterns. The temper of the times is the temperament which is biologically based, influenced by mechanisms that adapt social behaviour to changes in food supply, whether actual or perceived. Such a system is associated with behaviours including monogamy, territoriality, intensive care of the young, and reduced sexual activity—behaviours that encourage hard work, skills and innovations.

But this system also exists in relation to a physiological system involved in stress response, aggression and survival in dangerous environments, even war, Dr Penman suggests that by understanding the cyclical patterns of civilisations, we may stem the tide of decline. In 2007 he set up the Biohistory Foundation to explore multidisciplinary areas that can inform biohistory theory. His book is also available as an extended hardcover version for academic researchers.

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THE LOST ART OF RESURRECTION  
by Freddy Silva  
Invisible Temple, Portland, USA, 2014  
ISBN 978-0-9904151-1-4 (214pp tpb)  
Available: [www.invisibletemple.com](http://www.invisibletemple.com)

Intelligent people around the world believe the Christian paradigm that Jesus died on a cross and was resurrected three days later. What they may not know is that this is a model that had been passed down through the ages. In *The Lost Art of Resurrection*, Freddy Silva (see 18/01, 20/02) makes it clear that resurrection applied to a state of enlightenment achieved while still living.

Ancient mystery traditions across the globe had initiation rites that offered worthy individuals life-altering experiences of communion with higher realities. When these initiates "rose from the dead", they had survived a series of spiritual journeys and tests. Furthermore, as Silva describes, these initiation/ resurrection rituals usually took place in special places—caves, mounds, pyramids, chambers, mazes—that tapped into the energy and resonance of telluric currents which assisted the initiate in the soul's journey, as did the dark, silent conditions that fostered the required sensory deprivation to achieve what today we might call near-death experiences. Indeed, Silva underwent something of the initiate's journey inside the Great Pyramid's King's Chamber when the lights went out.

Part sacred-sites travelogue and part esoteric study, Silva's book rediscovers wisdom of the ancients.

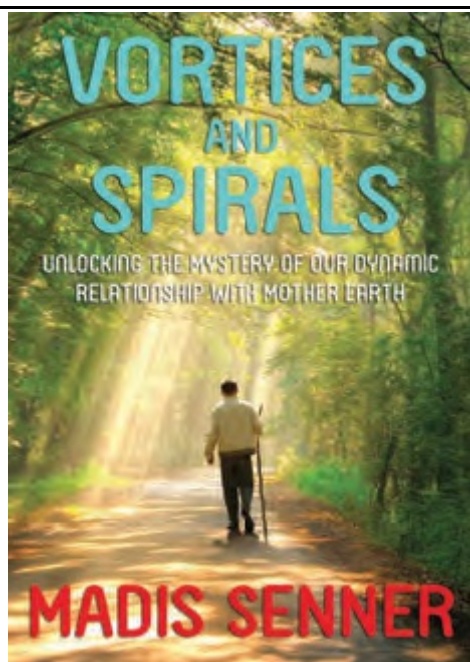
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GOD'S BLUEPRINT  
by Christopher Knight  
Watkins Publishing, London, UK, 2015  
ISBN 978-1-78028-749-2 (229pp tpb)  
Available: [www.watkinspublishing.com](http://www.watkinspublishing.com)

The Earth-Moon-Sun (EMS) system exhibits amazing geometric and numerical relationships, but is this sheer coincidence or the handiwork of "the Great Architect of the Universe"? Christopher Knight, an engineer and self-declared sceptic steeped in research into Freemasonry and Neolithic science, has an open-minded attitude in comparing science and religion (see reviews of his books, co-written with Alan Butler, in 11/06, 17/01). He concludes that the EMS system has been evolving through Earth's history— coming into its most exquisite presentation just at the time when humanity reached the point where we could appreciate and understand it.

Knight reinforces his observations about ancient metrology with an examination of meaningful numbers such as 366 (the number of Earth rotations in a year and degrees in the megalithic circle), 27.322 (the Moon's circumference as a percentage of the Earth's), and the 100-400-40,000 link (40,000 megalithic yards equalling one solar degree). The maths is so astonishing that, as Knight suggests, "God's blueprint" is being revealed. Add to this some astounding

facts about our super-ancient DNA code and we have a "living message" that can be traced to the birth of life on Earth—and maybe can even be translated. Knight tells an intriguing tale about his own experience within a megalithic structure. His book bridges the gap between scientific and religious world views.



VORTICES AND SPIRALS  
by Madis Senner  
Mother Earth Press, NY, USA, 2015  
ISBN 978-0-9908744-0-9 (185pp tpb)  
Available: [www.motheearthpress.net](http://www.motheearthpress.net)

We have a special, dynamic bond with Mother Earth in co-creating to help both Her and humanity. The arts of dowsing and geomancy can aid this relationship and assist in our wellbeing and spiritual development says Madis Senner, a former New York-based global money manager who in the early 2000s took an about-turn to explore Earth energies and spiritual healing practices.

Informed especially by Hindu mysticism, Senner set out to discover the consciousness that creates and transforms the universe. He came to understand the planes of energy and how they interact with the physical world, eventually perceiving the action of Earth Prana and Cosmic Prana in producing energy flows and vortices. He learnt how to dowse Earth chakras, form energy vortex rings and use talismans to power local energy imprints.

Senner demonstrates how to detect vortices at sacred sites and in healing environments, measure your "draw" of prana, and form vortices according to factors such as Earth sentience, spiritual or healing ability, intention, perseverance and prana type. He also shows how to prepare stone circles, form vortices within vortices, deal with negative spirals (e.g., Wi-Fi hotspots) and create labyrinths as contemplation tools. Senner says that bringing a spiral into your life adds a mystical, timeless element, encompassing oneness and love.

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GET THE PICTURE?!

by Brent Marchant  
Brent Marchant, Chicago, USA, 2014  
updated 2nd ed. (first pub. in 2007)  
ISBN 978-1-505570-16-8 (408pp tpb)  
Available:  
[www.BrentMarchant.com](http://www.BrentMarchant.com)  
Amazon: <http://tinyurl.com/og7bxqa>

Combining his love of film with the concept of conscious creation, Brent Marchant takes us on an insightful adventure in *Get the Picture?!*, the recently updated prequel to *Consciously Created Cinema* (22/04). Marchant credits the writings of Jane Roberts and her channelled entity Seth with providing him with his foundation in conscious creation, which is driven by thoughts and beliefs which fuse with the power of All That Is before

becoming manifest physically. He also includes quotes from Roberts/Seth throughout.

Film can be an excellent way of revealing conscious creation principles in action (even if their writers and directors aren't aware of it), and Marchant has chosen many illustrative examples. The films, too numerous to mention here, were all made before 2006. The concepts include: overcoming "creation by default", matching perceptions, self-actualisation, free will and choice in manifestation, changing ourselves and our circumstances, facing fears and living heroically, exploring dreams and alternative realms, and living life in fulfilment.

Marchant's books are a joy to read. Not only do they help you appreciate these films with different eyes, they present you with profound teachings for making positive life changes.



#### ANCIENT ALIENS AND SECRET SOCIETIES

by Mike Bara

Adventures Unlimited Press, USA, 2015

ISBN 978-1-939149-40-4 (257pp tpb)

Available:

[www.nexusmagazine.com](http://www.nexusmagazine.com)

[www.AdventuresUnlimitedPress.com](http://www.AdventuresUnlimitedPress.com)

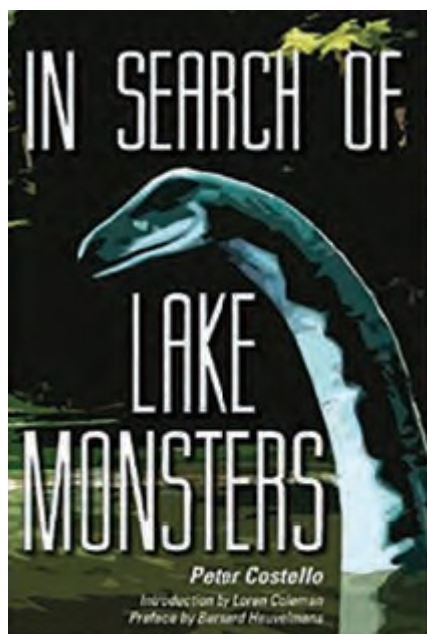
Continuing the themes of his *Ancient Aliens on the Moon* and *...on Mars* books (20/01, 21/02, 21/06), Mike Bara offers supporting evidence for the influence of ancient astronauts, specifically the Anunnaki and the Nephilim, on human development.

He says that knowledge of their role in human civilisation was suppressed by self-selected "anointed ones" and kept alive in secret societies through the millennia. Three such societies— the Crowleyesque "Magicians", the Scottish Rite Freemasons and the occult Nazis—trace their origins to ancient Egypt and formed a strange union with the space agency NASA.

According to Bara, the Moon landings were designed to coincide with stellar alignments in ritual homages to the ancient Egyptian stellar gods Osiris (Orion) and Horus (Regulus) and the goddess Isis (Sirius), as passed down by the ancient astronauts. Indeed, Apollo 11 astronaut Buzz Aldrin is believed to have conducted a Masonic communion service 33 minutes after landing on the lunar surface, at a time when Sirius was 19.5 degrees above the horizon. These numbers, 33 and 19.5, have been shown to have significance in terms of tetrahedral or hyperdimensional physics, as Mike Bara and Richard Hoagland have pointed out with the siting of certain monuments on Mars.

Bara's purview touches on ancient cataclysms, temples and artefacts, and even the JFK assassination.

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#### IN SEARCH OF LAKE MONSTERS

by Peter Costello

Anomalist Books, Texas, USA, 2015

(revised edition; first published in 1974)

ISBN 978-1-938398-32-2 (351pp tpb)

Available: [AnomalistBooks.com](http://AnomalistBooks.com)

Now a classic in the cryptozoology literature, Peter Costello's 1974 book *In Search of Lake Monsters* has been republished. This edition includes an introductory conversation between Costello and cryptozoologist Loren Coleman, and a new Afterword. The second-edition (1975) preface is by (the late) Bernard Heuvelmans, scientist, explorer, researcher and author of *In the Wake of the Sea-Serpents*, and also Costello's great inspiration for his own research. Born and based in Dublin, Costello has followed other paths in his writing career, with books on Conan Doyle, Joyce, Verne and Irish history to his name. A long-time newspaper literary editor, he was tracked down by Coleman and this revised edition is the result.

With an engaging style throughout, Costello looks into the Loch Ness "monster" mystery: theories as to what it could be, historical records, eyewitness accounts, photographs, films and illustrations. He also reports sightings from Ireland, Iceland, Scandinavia, Siberia, North and South America, Asia, Australasia and elsewhere. Folklore has recorded these creatures by a variety of names: the Piast in Ireland, the Naitaka or Ogopogo in Canada and the Bunyip in Australia, for example. Costello proposes that the Loch Ness creature and its relatives are large, longnecked seals, as first suggested in 1965 by Heuvelmans, yet are elusive.

Stay tuned for a new edition of Costello's 1979 book, *The Magic Zoo*, and a new title, *Beasts Beyond Belief*.

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#### SWALLOW THIS:

Serving Up the Food Industry's Darkest Secrets

by Joanna Blythman

Fourth Estate, London, UK, 2015

ISBN 978-0-00-754833-0 (311pp tpb)

Available: [www.4thestate.co.uk](http://www.4thestate.co.uk)

The lengths to which the food manufacturing/processing industry go in order to hide the truth about their practices shocked even seasoned investigative food journalist Joanna Blythman when she began her in-depth research for *Swallow This*. Having already exposed one aspect of the subject in *Shopped: The Shocking Power of British Supermarkets* (see 12/01), Blythman needed to know more about what goes on in the processing part of the food chain.

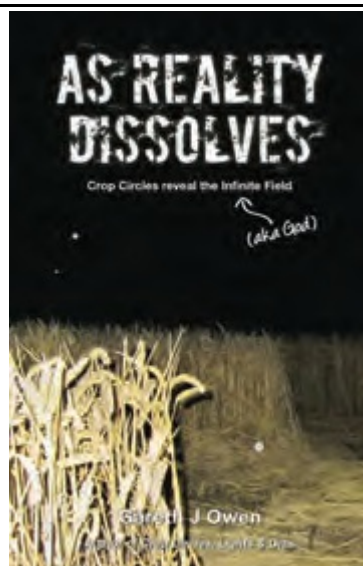
She gained access to factories, industry suppliers, insiders and even Europe's annual food trade expo, a showcase of the latest processing techniques and synthetic products.

Blythman explains how the processed food system works, why similar products taste the same, what goes on along

the factory assembly line, how the industry adopts "clean labelling" practices that are very misleading, and what manufacturers do to prolong a product's shelf life.

In detailing the characteristics of processed food, she analyses aspects from sweet and oily, flavoured and coloured, watery and starchy to tricky, old and packed. She also highlights the deception in describing a food as "natural", whether with the use of artificial colours and flavours or the injection of water into meats to bulk them up. Many of these additives don't have to be declared because they're "processing aids" which are allowed under the regulations.

Her well-researched book will encourage even careful consumers to reassess their food choices.



#### AS REALITY DISSOLVES

by Gareth J. Owen

Mistymoon Mountain, Australia, 2015

ISBN 978-0-9870558-5-9 (219pp tpb)

Available:

[www.nexusmagazine.com](http://www.nexusmagazine.com)

[www.mistymoonmountain.com](http://www.mistymoonmountain.com)

Sometimes the veil between the physical and nonphysical worlds can be very thin indeed. So-called "Thin Places" and "Thin Events" are part and parcel of Gareth Owen's new book, *As Reality Dissolves*. It takes in some of the ground he covered in his 2012 book *Crop Circles, Lights & Orbs*, and ventures into new territory.

A computer security entrepreneur with science and psychology degrees, Owen has travelled to exotic places and to the home of crop circles, having phenomenal experiences along the way. After a visit to sacred places in the UK, those mysterious luminous orbs seemed to return with him to Australia. Anomalous events occurred that demonstrate how thin the veil of reality is: an old church with an energy wall that prevented entry to an unwelcome visitor; a missing step in a stairway; a possum that walked through a steel cage; a beloved dog that spoke to him from the afterlife. These goings-on suggest that reality is not as solid as we've been conditioned to think.

And get us to think, Owen does in spades. Whether about colour perception, ancient knowledge, the limitations of religion and science, the illusion of materialism, quantum field relevance or the afterlife as an inevitable consequence of the structure of reality, Owen educates and amuses with his insights. The magic and mystery deepen, as to be expected if we're in "something called infinity". He concludes that the power of love is the fundamental cosmic force, even the precursor to consciousness. Expand your mind!

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#### THE HISTORICAL JESUS FOUND

by Barry Page

CreateSpace/Amazon Books, 2015

ISBN 978-1-5116-6355-7 (203pp pb)

Available: Amazon.com

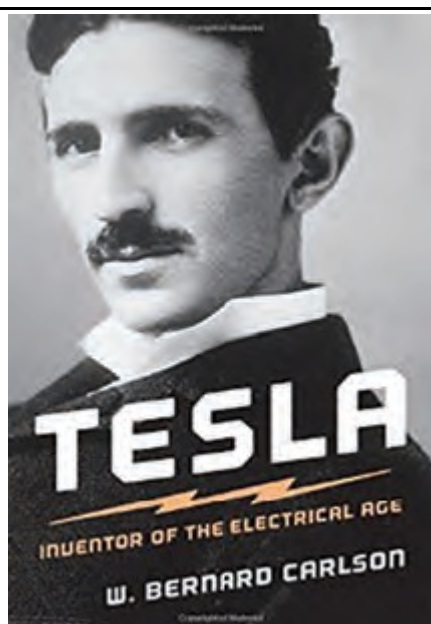
An Australian chemical engineer who is a student of the Hebrew and Christian bibles as well as the Qur'an, Barry

Page has conducted extensive studies, with the help of historians and scholars, into the history and genealogy of Jesus.

Among his documentary sources are: Aramaic texts written by Abdius, Bishop of Babylon, c. 150 AD; a genealogy written by descendants of Jesus (the Desposyni) and presented to Pope Sylvester in Rome in 318 AD before being hidden in the Vatican's secret archives, where an anonymous researcher recently managed to photograph it and smuggle the images to England; the Nazarene Scroll, c. 70 AD, which was purchased by the Church in the 1960s but not before the translator secreted away a copy of its genealogical charts; and a box of Templar-sourced material.

In Page's view, these genealogies and chronologies support the notions that Jesus had a twin brother, Judah Thomas, that he had two wives in Judea—Mary Magdalene, the Lydia, daughter of John the Baptist, and Mary of Bethany (and possibly two wives in India/Kashmir)—that he had children by these women who were also spiritual leaders, that he was resuscitated (not resurrected) after the crucifixion, and that he travelled extensively in Britain, France, Asia Minor and India/Kashmir.

While acknowledging that the truth may be shocking for many, Page ultimately wants to rethrone Jesus Christ as the founding monotheistic prophet of Christianity.



TESLA

by W. Bernard Carlson

Princeton University Press, 2013

ISBN 978-0-691-05776-7 (500pp hc)

Available: [www.press.princeton.edu](http://www.press.princeton.edu)

A professor of history and of science, technology and society at the University of Virginia, W. Bernard Carlson spent 15 years researching the life and inventions of Nikola Tesla for his biography. He has accessed correspondence, diaries, notebooks, business and legal records, patents, press interviews, photographs, FBI files and the archives of many institutions, libraries and museums including the Nikola Tesla Museum in Belgrade. His extensive notes on his sources are invaluable for Tesla researchers, and his book sheds light on many misconceptions perpetuated in some popular Tesla biographies.

Professor Carlson examines how Tesla invented, how his inventions worked, and what happened as he introduced them. He tries to make sense of Tesla's "spectacular ascent" with his revolutionary alternating current (AC) technologies (1884-94) and then his "equally dramatic descent" (1895-1905), suggesting that Tesla had had his best days by 1904.

As Professor Carlson argues, Tesla's style as an inventor involves a tension between idealism and illusion: finding the right way to present an invention to excite financial backers and the public with the idea of producing it as a working device. Instead of publishing serious scientific papers, Tesla was happier making public presentations, linking his inventions with cultural wishes and the social milieu.

This is an absorbing read, and Professor Carlson has a keen eye for historical accuracy and context.

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#### SPYHUNTER

by Michael Shrimpton

The June Press, UK, 2014 (2nd ed.)

ISBN 978-0-9927501-0-7 (703pp tpb)

Available: [www.junepress.com](http://www.junepress.com)

This is a history with a difference, offering views on "what really happened" as opposed to "what other people want you to think happened", as author Michael Shrimpton promises. A long-standing barrister in England with a wealth of contacts before he became involved in the intelligence world in the late 1990s and developed even more high-level contacts, Shrimpton has written an explosive book that upends official truths about key events in past and recent history. Yet in February 2015, Shrimpton was sentenced to 12 months in prison for revealing a possible nuclear attack planned during the 2012 London Olympic Games. Did he come too close to some very uncomfortable truths?

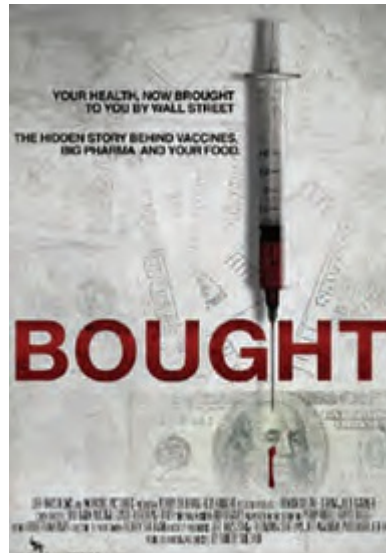
Shrimpton's key focus in *Spyhunter* is the secretive German defence-intelligence agency called the DVD, which he understands has influential agents in high places around the world and operates without the knowledge of the German people (also see Gordon Duff's article in this issue). The DVD may well have had its origins before the 20th century but consolidated in the interwar years to become, as Shrimpton claims, a ruthless force behind the scenes for over 65 years. It absorbed the Nazis' internal intelligence agency, the Gestapo, in 1945, but Shrimpton says the Gestapo "were actually nicer"!

Shrimpton has quite a turn of phrase throughout his massive book. The impatient reader will be drawn to open pages at random and then be distracted by the next revelations, many of which are deeply disturbing.

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# DVDs

## Compiled by Duncan Roads



**BOUGHT:**  
The Truth Behind Vaccines, Big Pharma & Your Food  
by Jeff Hays Films © 2015 (90mins)  
Available:  
[www.boughtmovie.net](http://www.boughtmovie.net)

Filmmaker Jeff Hays believes that we have a right to the truth so that about our health, food and medicine. *Bought* is a film about health being sold out from underneath individuals by big pharmaceutical companies, dangerous vaccinations and a food supply chain contaminated by the use of GMOs. It dives deeply into the inner workings of the industries at the core of our food and health care systems, exploring the truth about how vaccines and drugs are developed and rushed to market and the ongoing secrecy behind the genetic engineering of our food supply. Like the banks, the food and drug industries have grown more powerful and less transparent over time, and profits have become more important than health.

According to Hays: "From opiates, to statins, to a blizzard of psychotropic medications that do far more harm than good, the film covers how our entire health care system, from education to practice, has been *Bought...* Three storylines converge on Wall Street in a tale of corruption, greed and shocking lack of conscience."

Jeff Hays is already well known for his 2012 documentary *Doctored*, which exposes how the US medical and drug industries conspire to control the health care system.

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DESPERATELY SEEKING WHITE ZONE  
by Marc Khande © 2015 (90mins)  
Available: <http://tinyurl.com/oauauaf>

This is a newly emerging subject which many people are still unaware of. Who are these people who suffer from electrohypersensitivity (EHS) that the media talk about every now and again?

Having been made aware by a friend who had herself started to suffer from electrohypersensitivity, film director Marc Khande spent two years investigating and meeting about 60 people suffering from EHS all over France and abroad, people who have become hypersensitive to electromagnetic fields.

For those who suffer from electrohypersensitivity, the situation is urgent. To protect themselves they have to shut themselves away, move house or, even worse, leave their families and stop working.

This investigation also shows that the symptoms described by EHS sufferers are curiously similar to those faced by professional radar operators. These are very similar technologies, and the harmful side-effects have been documented for 50 years!

Through statement after statement in the film, a troubling reality is revealed: for reasons which have yet to be explained completely, men, women and also children are developing an intolerance to artificial electromagnetic fields which are broadcast on a huge scale in today's environment. Is it possible that we may all be affected at differing levels? Might there be other medium- and long-term effects? This is an important film for our times.

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# MUSIC

Reviewed by Richard Giles



## LIGHT

by Midival Punditz

Six Degrees Records, 2015 (55mins)

Distributors:

Australia—Fuse Music, [www.fusemusic.com.au](http://www.fusemusic.com.au)

USA—Six Degrees Records, [www.sixdegreesrecords.com](http://www.sixdegreesrecords.com)

Midival Punditz are two Indian musicians, Gaurav Raina and Tapan Raj, who have been working together for 18 years. *Light* is their fourth studio album. Its style is rooted in rock and electronica but with doses of traditional Indian music. It features musicians such as flautist Pt Ajay Prasanna, Rajasthani folk artist Kutle Khan, Hindustani classical singer Malini Awasthi, drummer Shardul Mehta and guitarist Karan Sharma. More of a listening than a dancing album, it comes over more slowly than do previous releases. Excellent.

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## KUTUMBA

by Sacred Earth

Sacred Earth Music, Australia, 2015

Distributors:

Australia—Phoenix, [www.phoenixdistribution.com.au](http://www.phoenixdistribution.com.au); [sacredearth.bandcamp.com/](http://sacredearth.bandcamp.com/)

Prem and Jethro of Sacred Earth (15/03, 13/03) have a new album in *kuTumba*, named after the Nepali word for the celebration of family and community. Prem, on lead vocals and synthesisers, and Jethro, on flutes and acoustic guitar, are backed by diverse guest artists such as Kate B on Celtic harp and vocals on two tracks. Mantras full of earthy tones are overlaid with sublime harmonies. Prem and Jethro are celebrating their joy at bringing two more children into the world. Sacred Earth returns with an harmonious, ethereal splash.

#### SHAKUHACHI SLEEP MUSIC

by Riley Lee

Sounds True, USA, 2015 (60mins)

Distributors:

Australia—Phoenix, [www.phoenixdistribution.com.au](http://www.phoenixdistribution.com.au)

USA —[www.soundstrue.com](http://www.soundstrue.com); [www.rileylee.net](http://www.rileylee.net)

Riley Lee is a Grand Master of the shakuhachi flute and has many superlative CDs to his name (e.g., see 18/02). Inner stillness is what his shakuhachi playing is about, conjuring up images of a quiet pond reflecting the moonlight. On *Shakuhachi Sleep Music*, recorded in Australia, Riley plays a traditional and profoundly soothing sequence of bamboo flute pieces to move the listener to a peaceful, restful space, ready for a quiet drowse. He's accompanied by Bronwyn Cleworth on cello, Charles Cleworth on guitar and John Cleworth on marimba and percussion. Outstanding Riley Lee.

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#### ETHERIA

by Peter Kater

Real Music, 2015 (59mins)

Distributors:

Australia—Phoenix, [www.phoenixdistribution.com.au](http://www.phoenixdistribution.com.au)

USA —[www.RealMusic.com](http://www.RealMusic.com)

Peter Kater is a 10-time Grammy nominee and multiplatinum-selling pianist and composer. He's just released his fifth CD in the *Elements Series* (13/02), titled *Etheria*. He's been a leading innovator in contemporary instrumental music for more than three decades, and his music is heard in healing centres across the world. *Etheria* sounds like a collection of heavenly choirs creating inspiring, soul-filled music. It's both exquisitely sensitive and majestic at the same time. Perfect for relaxation or a meditative time, or for sheer listening pleasure.

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# Cartoons

by Phil Somerville





Somerville

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# NEXUS

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